STATE OF NEW HAMPSHIRE
Department of Environmental Services
Air Resources Division

TITLE V OPERATING PERMIT

Permit No: **TV-OP-050**
Date Issued: **June 28, 2004**

This certifies that:
Wheelabrator Claremont Company, L.P
RFD #2, Box 298 Grissom Lane
Claremont, NH 03743

has been granted a Title V Operating Permit for the following facility and location:
Wheelabrator Claremont Company, L.P
Grissom Lane
Claremont, NH 03743
AFS Point Source Number - 3301900029

This Title V Operating Permit is hereby issued under the terms and conditions specified in the Title V Operating Permit Application filed with the New Hampshire Department of Environmental Services on **June 6, 1996,** under the signature of the following responsible official certifying to the best of his knowledge that the statements and information therein are true, accurate and complete.

Responsible Official:
Mr. Peter M. Kendrigan
Plant Manager
(603) 542-8764
Technical Contact:
Mr. Theodore Clark
E, H & S Director
(603) 542-8764

This Permit is issued by the New Hampshire Department of Environmental Services, Air Resources Division pursuant to its authority under New Hampshire RSA 125-C and in accordance with the provisions of Code of the Federal Regulations 40 Part 70. This permit is effective upon issuance.

This Title V Operating Permit shall expire on **June 30, 2009.**

SEE ATTACHED SHEETS FOR ADDITIONAL PERMIT CONDITIONS

For the New Hampshire Department of Environmental Services, Air Resources Division

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Director, Air Resources Division

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ABBREVIATIONS

AAL	Ambient Air Limit
AP-42	Compilation of Air Pollutant Emission Factors
ARD	Air Resources Division
ASTM	American Society for Testing and Materials
BTU	British Thermal Units
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CGA	Cylinder Gas Audit
CO	Carbon monoxide
CO_2	Carbon dioxide
COMS	Continuous Opacity Monitoring System
CPMS	Continuous Parameter Monitoring System
DER	Discrete Emission Reduction
DLIS	Dry Lime Injection Scrubber
DSCM	Dry standard cubic meter
DSCF	Dry standard cubic foot
ECS	Evaporative Cooling System
Env-A	New Hampshire Code of Administrative Rules - Air Resources Division
ERC	Emission Reduction Credit
FR	Federal Register
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
hr	Hour
lb	Pound
lb/hr	Pounds per hour
mg/L	Milligrams per liter (ppm)
mg/dscm	Milligrams per dry standard cubic meter
ml	Milliliters
MMBTU	Million British Thermal Units
MSW	Municipal Solid Waste
MWC	Municipal Waste Combustion
NAAQS	National Ambient Air Quality Standard
NHDES (or DES)	New Hampshire Department of Environmental Services
NO_x	Oxides of Nitrogen
NSPS	New Source Performance Standard

ABBREVIATIONS (cont.)

NSR	New Source Review
PACIS	Powdered Activated Carbon Injection System
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 microns diameter
ppm	part per million
ppmv	part per million by volume
ppmdv	part per million by dry volume
PS	Performance Specification
psi	pounds per square inch
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RAA	Relative Accuracy Audit
RACT	Reasonably Available Control Technology
RTAP	Regulated Toxic Air Pollutant
scf	Standard cubic feet
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TEQ	Toxic equivalency
TSP	Total Suspended Particulate Matter
TPY	Tons per Year
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

Facility Specific Title V Operating Permit Conditions

I. Facility Description of Operations:

Wheelabrator-Claremont Company (Wheelabrator) operates a resource recovery facility in Claremont, NH. The resource recovery facility burns municipal solid waste (MSW) in two 100 tons/day mass burn units that generate steam. The steam drives a turbine generator to produce electricity for sale to the local utility. The gross generating capacity of the facility at the maximum capacity rating is nominally 6 MW.

The MSW combustors are two identical mass-fired waterwall boilers each with a maximum heat input rate of 43.1 MMBTU/hr. Each unit is equipped with a single auxiliary propane fired burner rated at a maximum of 15 MMBTU/hr. The flue gas runs through pollution control equipment that controls acid gases, particulate matter and other pollutants. Each boiler stack is equipped with a continuous emissions monitoring system and a continuous opacity monitoring system. The quenched bottom ash is transported via a drag conveyor to an ash handling room. The ash is loaded into containers and stored under cover until it is transported to the landfill.

In the two applications filed on June 20 and September 11, 2002, Wheelabrator has applied for a temporary permit to install an Evaporative Cooling System and a Powdered Activated Carbon Injection System to meet the requirements of Env-A 3300. The installation of this new pollution control equipment is covered under the Temporary Permit, FP-T-0108. In addition, the Temporary Permit authorizes the replacement of the existing fiberglass filter bags in the fabric filters with more efficient Ryton bags and the increase of the steam production rate of each incinerator to a maximum of 29,500 pounds per hour. This Title V Operating Permit contains conditions for operations prior to and after the pollution control equipment retrofit.

II. Permitted Activities:

In accordance with all of the applicable requirements identified in the Permit, the Permittee is authorized to operate the devices and/or processes identified in Sections III, IV, V, and VI within the terms and conditions specified in this permit.

III. Significant Activities Identification:

A. Significant Activities:

The activities identified in Table 1 are subject to and regulated by this Title V Operating Permit.

Table 1 – Significant Activity Identification

Emission Unit #	Description of Emission Unit	Emissions Unit Maximum Permitted Capacity
EU01	Unit #1 - MSW Boiler (Waterwall Boiler) American Shack/Von Roll Grates Serial No. 12405-BX Installed 1985-1986	a. The maximum heat input of this device shall be limited to 43.1 MMBTU/hr. b. The maximum firing rate of the auxiliary burner equipped on this device shall be limited to 15 MMBTU/hr. The auxiliary burner shall be restricted to firing propane fuel at a maximum rate of 159.6 gallons per hour assuming a heating value of 94,000 BTU per gallon. c. The maximum charge rate of this device shall be limited to 9,583 lb/hr of MSW based upon 29,500 lb/hr steam with type 2 waste at 4,500 BTU/lb. The MSW shall be limited to types 0,1,2,3 and 6 wastes.

Table 1 – Significant Activity Identification		
Emission Unit #	**Description of Emission Unit**	**Emissions Unit Maximum Permitted Capacity**
		d. The maximum MSW throughput per year shall be limited to 36,500 tons.
EU02	Unit #2 - MSW Boiler (Waterwall Boiler) American Shack/Von Roll Grates Serial No. 12405-BX Installed 1985-1986	a. The maximum heat input of this device shall be limited to 43.1 MMBTU/hr. b. The maximum firing rate of the auxiliary burner equipped on this device shall be limited to 15 MMBTU/hr. The auxiliary burner shall be restricted to firing propane fuel at a maximum rate of 159.6 gallons per hour assuming a heating value of 94,000 BTU per gallon. c. The maximum charge rate of this device shall be limited to 9,583 lb/hr of MSW based upon 29,500 lb/hr steam with type 2 waste at 4,500 BTU/lb. The MSW shall be limited to types 0,1,2,3 and 6 wastes. d. The maximum MSW throughput per year shall be limited to 36,500 tons.

B. Stack Criteria:

The stacks listed in Table 2 for the above identified significant devices at this facility shall meet the following criteria in accordance with the state-only modeling requirements specified in Env-A 1400 and NAAQS:

Table 2 - Stack Criteria		
Emission Unit #	**Stack Height (feet)**	**Stack Exit Diameter (feet)**
EU01 & EU02 (each unit before Env-A 3300 retrofit)	150	2.6
EU01 & EU02 (each unit after Env-A 3300 retrofit)	150	2.6

Preauthorized changes to the state-only requirements[1] pertaining to stack parameters set forth in this permit, shall be allowed only when an air-quality impact analysis, which meets the criteria of Env-A 606, is performed either by the facility or DES (if requested by the facility in writing) in accordance with the "DES Procedures for Air Quality Modeling". All air-quality impact analyses shall be kept on file at the facility for review by the DES upon request.

IV. Insignificant Activities Identification:

All activities at this facility, which meet the criteria identified in Env-A 609.03(g), shall be considered insignificant activities. Emissions from the insignificant activities shall be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this Permit.

[1] The term "state-only requirement" is used to refer to those requirements that are not federally enforceable but are state requirements as defined in Env-A 101.263.

V. Exempt Activities Identification:

All activities identified in Env-A 609.03(c) shall be considered exempt activities and shall not be included in the total facility emissions for the emission-based fee calculation described in Section XXIII of this permit.

VI. Pollution Control Equipment Identification:

The devices and/or processes identified in Table 3 are considered pollution control equipment or techniques for each identified emissions unit:

Table 3 - Pollution Control Equipment Identification

Pollution Control Equipment Number	Description of Equipment	Emission Unit Number
Prior to final compliance date in Section VIII. J for Env-A 3300		
PC01	Baghouse (Reverse Pulse Jet Fabric Filter)	EU01
PC02	Baghouse (Reverse Pulse Jet Fabric Filter)	EU02
PC03	Dry Lime Injection Scrubber	EU01
PC04	Dry Lime Injection Scrubber	EU02
PC05	Thermocouple System	EU01
PC06	Thermocouple System	EU02
After final compliance date in Section VIII. J for Env-A 3300		
PC01	Baghouse (Reverse Pulse Jet Fabric Filter)	EU01
PC02	Baghouse (Reverse Pulse Jet Fabric Filter)	EU02
PC03	Wet Lime Injection Scrubber	EU01
PC04	Wet Lime Injection Scrubber	EU02
PC07	Powdered Activated Carbon Injection System	EU01 & EU02
PC08	Evaporative Cooling System	EU01
PC09	Evaporative Cooling System	EU02

VII. Alternative Operating Scenarios:

No alternative operating scenarios were identified for this permit.

VIII. Applicable Requirements:

A. State-only Enforceable Operational and Emission Limitations:

1. **Before the final compliance date** for Env-A 3300 listed in Section VIII. J, the Permittee shall be subject to the state-only operational and emission limitations identified in Table 4a below:

Table 4a - State-only Enforceable Operational and Emission Limitations Applicable Before the Final Compliance Date for Env-A 3300			
Item #	**Applicable Requirements**	**Applicable Emission Unit**	**Regulatory Cite**
1.	The emissions of any regulated toxic air pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual ambient air limit as set forth in Env-A 1450.01, *Table Containing the List Naming All Regulated Toxic Air Pollutants*.	Facility Wide	Env-A 1400
2.	The owner of any device or process that emits a RTAP, shall determine compliance with the ambient air limits by using one of the methods provided in Env-A 1406.02, Env-A 1406.03, or Env-A 1406.04.	Facility Wide	Env-A 1406.01
3.	Documentation for the demonstration of compliance shall be retained at the facility, and shall be made available to the DES for inspection.	Facility Wide	Env-A 1404.01(d)
4.	If DES revises the list of RTAPs or their respective ambient air limits or classifications under RSA 125-I:4, II and III, and as a result of such revision the Permittee is required to obtain or modify the Permit under the provisions of RSA 125-I or RSA 125-C, the Permittee shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification. DES shall include as conditions in any permit issued as a result of a revision to the list of RTAPs a compliance plan and a schedule for achieving compliance based on public health, economic and technical consideration, not to exceed 3 years.	Facility Wide	RSA 125-I:5, IV
5.	The Permittee shall not allow visible emissions from either MWC unit to exceed an average of 20% opacity in any continuous 6-minute period, as measured by the opacity monitors or EPA Reference Method 9.	EU01 & EU02	Env-A 1903
6.	HCl emission standards for each MWC unit, based on a 3-run stack test using a method approved by DES shall be as follows: a. Average emission level of 50 ppmdv at 7% O_2; or b. 90% HCl removal efficiency, whichever is less stringent.	EU01 & EU02	Env-A 1904.05
7.	Name Plate and Instruction Posting Requirements: a. The Permittee shall install the manufacturer's name plate in a conspicuous place on each MWC unit, giving model number, rated capacity, and the types of waste for which the device is designed. b. The Permittee shall post detailed instructions for the operation of each MWC unit in a conspicuous place near the device.	EU01 & EU02	Env-A 1905.01
8.	Trained and Competent Operator Required: The Permittee shall have an individual, trained and competent in the operation of the incinerator, in charge of the facility.	EU01 & EU02	Env-A 1905.02
9.	The sulfur content of propane combusted in any of the MWC units shall not exceed 15 grains of sulfur per 100 scf of propane, calculated as hydrogen sulfide at standard temperature and pressure.	EU01 & EU02	Env-A 1605.01

2. **After the final compliance date** for Env-A 3300 listed in Section VIII. J, the Permittee shall be subject to the state-only operational and emission limitations identified in Table 4b below:

Table 4b - State-only Enforceable Operational and Emission Limitations Applicable After the Final Compliance Date for Env-A 3300			
Item #	**Applicable Requirements**	**Applicable Emission Unit**	**Regulatory Cite**
1.	The emissions of any regulated toxic air pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual ambient air limit as set forth in Env-A 1450.01, *Table Containing the List Naming All Regulated Toxic Air Pollutants*.	Facility Wide	Env-A 1400
2.	The owner of any device or process that emits a RTAP, shall determine compliance with the ambient air limits by using one of the methods provided in Env-A 1406.02, Env-A 1406.03, or Env-A 1406.04.	Facility Wide	Env-A 1406.01
3.	Documentation for the demonstration of compliance shall be retained at the facility, and shall be made available to the DES for inspection.	Facility Wide	Env-A 1404.01(d)
4.	If DES revises the list of RTAPs or their respective ambient air limits or classifications under RSA 125-I:4, II and III, and as a result of such revision the Permittee is required to obtain or modify the Permit under the provisions of RSA 125-I or RSA 125-C, the Permittee shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such permit or permit modification. DES shall include as conditions in any permit issued as a result of a revision to the list of RTAPs a compliance plan and a schedule for achieving compliance based on public health, economic and technical consideration, not to exceed 3 years.	Facility Wide	RSA 125-I:5, IV
5.	HCl emission standards for each MWC unit, based on a 3-run stack test using a method approved by DES shall be as follows: a. Average emission level of 50 ppmdv at 7% O_2; or b. 90% HCl removal efficiency, whichever is less stringent.	EU01 & EU02	Env-A 1904.05
6.	Name Plate and Instruction Posting Requirements: a. The Permittee shall install the manufacturer's name plate in a conspicuous place on each MWC unit, giving model number, rated capacity, and the types of waste for which the device is designed. b. The Permittee shall post detailed instructions for the operation of each MWC unit in a conspicuous place near the device.	EU01 & EU02	Env-A 1905.01
7.	Trained and Competent Operator Required: The Permittee shall have an individual, trained and competent in the operation of the incinerator, in charge of the facility.	EU01 & EU02	Env-A 1905.02
8.	The sulfur content of propane combusted in any of the MWC units shall not exceed 15 grains of sulfur per 100 scf of propane, calculated as hydrogen sulfide at standard temperature and pressure.	EU01 & EU02	Env-A 1605.01

B. Federally Enforceable Operational and Emission Limitations

1. **Prior to the final compliance date** for Env-A 3300 listed in Section VIII. J, the Permittee shall be subject to the Federally enforceable operational and emission limitations identified in Table 5a below:

Table 5a - Federally Enforceable Operational and Emission Limitations Applicable Before the Final Compliance Date for Env-A 3300

<table>
<tr><th>Item #</th><th>Applicable Requirement</th><th>Applicable Emission Unit</th><th>Regulatory Cite</th></tr>
<tr><td>1.</td><td>The Facility shall comply with the National Ambient Air Quality Standards (NAAQS) and the applicable requirements of RSA 125-C:6, RSA 125-C:11 and Env-A 606.04. These Sections include, but are not limited to, descriptions of the powers and duties of the commissioner, and requirements for adherence to permit application procedures and air pollution dispersion modeling impact analyses.</td><td>Facility Wide</td><td>RSA 125-C:6, RSA 125-C:11 & Env-A 606.04</td></tr>
<tr><td>2.</td><td>The emissions of sulfur dioxide from each MWC unit shall be limited to 26.5 lbs/hr.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>3.</td><td>The dioxin and furan emission rate(s) are limited to 3.4 x 10^{-7} TCDD lbs/hr per unit and 4.75 x 10^{-6} TCDF lbs/hr per unit.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>4.</td><td>The carbon monoxide emission rate from each MWC unit shall not exceed the following emission limitations:
a. 12 lb/hr which is equivalent to the following stack gas concentration corrected to 7% oxygen (3-hour rolling average):
<table>
<tr><th>Steam Production (lb/hr) (3-hour rolling average)</th><th>CO (ppmdv at 7% O_2) (3-hour rolling average)</th></tr>
<tr><td>0-18,000</td><td>270</td></tr>
<tr><td>19,000</td><td>262</td></tr>
<tr><td>20,000</td><td>254</td></tr>
<tr><td>21,000</td><td>245</td></tr>
<tr><td>22,000</td><td>237</td></tr>
<tr><td>23,000</td><td>229</td></tr>
<tr><td>24,000</td><td>221</td></tr>
<tr><td>25,000</td><td>212</td></tr>
<tr><td>26,000</td><td>204</td></tr>
<tr><td>26,500</td><td>200</td></tr>
</table>
b. 100 ppmdv corrected to 7% Oxygen, 4 day rolling average, as specified in the “Dioxin Emission Control Policy”.
c. 400 ppmdv corrected to 7% Oxygen, 8 hour rolling average as specified in the “Dioxin Emission Control Policy”.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>5.</td><td>The particulate matter emission rate from each MWC unit is limited to 0.02 gr/dscf[2] corrected to 12% CO_2.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>6.</td><td><u>NOx RACT Requirements:</u>
Each MWC unit shall be limited at all times to a NOx RACT emission limit of 0.53 lb per MMBTU (24-hour calendar day average).</td><td>EU01 & EU02</td><td>Env-A 1211.09</td></tr>
<tr><td>7.</td><td>The maximum steam production shall be limited to 29,500 lbs/hour/unit (3-hr rolling average) at 725^{o}F.</td><td>EU01 & EU02</td><td>FP-T-0108</td></tr>
<tr><td>8.</td><td>a. The Permittee shall charge a maximum of 9583 lbs/hr of MSW per each unit based upon type 2 waste at a heating value of 4500 BTU/lb.
b. The maximum municipal solid waste throughput per year shall be limited to 36,500 tons per unit.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>9.</td><td>The Permittee shall comply with the following operating practice requirements:</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
</table>

[2] This limit is more stringent than the limit of 0.08 gr/dscf at 12% CO_2 imposed by 40 CFR 60.52, *Standard for particulate matter* for incinerators with charging rate of more than 50 tons/day.

Table 5a - Federally Enforceable Operational and Emission Limitations Applicable Before the Final Compliance Date for Env-A 3300			
Item #	**Applicable Requirement**	**Applicable Emission Unit**	**Regulatory Cite**
	a. The Permittee shall comply with DES's "Dioxin Emission Control Policy Guidelines for Boilers and Resource Recovery Facilities" approved April 17, 1986 by the New Hampshire Air Resources Commission; b. No toxic or hazardous wastes which are subject to the Resource Conservation and Recovery Act (RCRA) shall be burned at this facility; c. Prior to ash loadout and transport, all fires must be extinguished. The bottom ash, fly ash, and scrubber residue must be quenched or otherwise wetted to suppress fugitive dust. Ash transport vehicles must be totally enclosed or covered; d. An auxiliary fuel burning system shall be maintained to be capable of maintaining the temperatures of combustion in the combustion zone, as required by Item #9.a, above; e. During incinerator startup, the baghouse and the DLIS shall not be by-passed while burning municipal solid waste; f. Operate a DES approved temperature sensor system that continuously measures and records the combustion zone temperature; and g. The devices listed in Table 1 shall be operated in conjunction with the appropriate air pollution control devices listed in Table 3.		
10.	Accidental Release Program Requirements Storage of regulated chemicals at the facility, are less than the applicable threshold quantities established in 40 CFR 68.130. Administrative controls will be established in order to ensure that inventories of regulated substances are maintained below the specified threshold quantities. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b. Design and maintain a safe facility; c. Take steps necessary to prevent releases; and d. Minimize the consequences of accidental releases, which do occur. If, in the future, the facility wishes to store quantities of high risk regulated substances above the threshold levels, an emergency response plan shall be submitted to the DES prior to storage above threshold quantities. This plan shall include the information listed in 40 CFR 68, Subpart E.	Facility Wide	40 CFR 68

2. **After the final compliance date** for Env-A 3300 listed in Section VIII. J, the Permittee shall be subject to the Federally enforceable operational and emission limitations identified in Table 5b below:

Table 5b - Federally Enforceable Operational and Emission Limitations Applicable After the Final Compliance Date for Env-A 3300

<table>
<tr><th>Item #</th><th>Applicable Requirement</th><th>Applicable Emission Unit</th><th>Regulatory Cite</th></tr>
<tr><td>1.</td><td>The Facility shall comply with the National Ambient Air Quality Standards (NAAQS) and the applicable requirements of RSA 125-C:6, RSA 125-C:11 and Env-A 606.04. These Sections include, but are not limited to, descriptions of the powers and duties of the commissioner, and requirements for adherence to permit application procedures and air pollution dispersion modeling impact analyses.</td><td>Facility Wide</td><td>RSA 125-C:6, RSA 125-C:11 & Env-A 606.04</td></tr>
<tr><td>2.</td><td>The particulate matter emission rate from each MWC unit is limited to 0.02 gr/dscf[2] corrected to 12% CO_2.</td><td>EU01 & EU02</td><td>PO-C-362 & 363</td></tr>
<tr><td>3.</td><td>Each MWC unit shall comply with the following emission limits as set forth in Env-A 3300:
<table>
<tr><th>Pollutant</th><th>Emission Limit[3]</th><th>Averaging Time</th></tr>
<tr><td>Particulate matter</td><td>70 mg/dscm[4]</td><td>3-run average (run duration specified in test method)</td></tr>
<tr><td>Opacity</td><td>10% (6-minute average)</td><td>30 6-minute averages</td></tr>
<tr><td>Carbon monoxide</td><td>100 ppmdv</td><td>4-hour (block average, arithmetic mean)</td></tr>
<tr><td>Cadmium</td><td>0.1 mg/dscm</td><td>3-run average (run duration specified in test method)</td></tr>
<tr><td>Lead</td><td>1.6 mg/dscm</td><td>3-run average (run duration specified in test method)</td></tr>
<tr><td>Mercury</td><td>0.028 mg/dscm or 85% control efficiency</td><td>3-run average (run duration specified in test method)</td></tr>
<tr><td>Sulfur dioxide</td><td>77 ppmdv, or 50% of the potential sulfur dioxide emission concentration</td><td>24-hour daily block geometric average concentration or percent reduction</td></tr>
<tr><td>Hydrogen chloride</td><td>250 ppmdv, or 50% of the potential hydrogen chloride emission concentration[5]</td><td>3-run average (minimum run duration is 1 hour)</td></tr>
<tr><td>Dioxins/furans</td><td>125 ng/dscm (total mass)</td><td>3-run average (minimum run duration is 4 hours)</td></tr>
<tr><td>Fugitive ash</td><td>Visible emissions for no more than 5% of hourly observation period</td><td>3 1-hour observation periods</td></tr>
</table></td><td>EU01 & EU02</td><td>Env-A 3303.02</td></tr>
<tr><td>4.</td><td>Emission limits specified in Item #3 shall apply to MWC units at all times except during periods of MWC unit startup, shutdown, or malfunction, as specified in 40 CFR 60.1710.</td><td>EU01 & EU02</td><td>Env-A 3306.02(e)</td></tr>
<tr><td>5.</td><td>Continuous emission monitoring data shall be used to determine compliance with emissions limits for SO_2 and CO.</td><td>EU01 & EU02</td><td>Env-A 3306.02(d)</td></tr>
<tr><td>6.</td><td><u>NOx RACT Requirements:</u>
Each MWC unit shall be limited at all times to a NOx RACT emission limit of 0.53 lb per million BTU (24-hour calendar day average).</td><td>EU01 & EU02</td><td>Env-A 1211.09</td></tr>
<tr><td>7.</td><td>The maximum steam production shall be limited to 29,500 lbs/hour/unit (4-hr block average) at 725^{o}F.</td><td>EU01 & EU02</td><td>FP-T-0108</td></tr>
</table>

[3] All emission limits are measured at 7% O_2.

[4] The emission limit imposed by Item #2 of Table 5b is more stringent than this limit. The facility shall comply with the most stringent limit, i.e., 0.02 gr/dscf at12% CO_2 even after the final compliance date.

[5] The emission limit imposed by Env-A 1904.05 is more stringent than the limit imposed by Env-A 3300. Hence the facility shall comply with Item #5 of Table 4b even after the final compliance date.

Table 5b - Federally Enforceable Operational and Emission Limitations Applicable After the Final Compliance Date for Env-A 3300

Item #	Applicable Requirement	Applicable Emission Unit	Regulatory Cite
8.	a. The Permittee shall charge a maximum of 9583 lbs/hr of MSW per each unit based upon type 2 waste at a heating value of 4500 BTU/lb. b. The maximum municipal solid waste throughput per year shall be limited to 36,500 tons per unit.	EU01 & EU02	PO-C-362 & 363
9.	The Permittee shall comply with the following operating practice requirements: a. No toxic or hazardous wastes which are subject to the Resource Conservation and Recovery Act (RCRA) shall be burned at this facility; b. Prior to ash loadout and transport, all fires must be extinguished. The bottom ash, fly ash, and scrubber residue must be quenched or otherwise wetted to suppress fugitive dust. Ash transport vehicles must be totally enclosed or covered; c. During incinerator startup, the control equipment listed in Table 3 shall not be by-passed while burning municipal solid waste; d. The devices listed in Table 1 shall be operated in conjunction with the appropriate air pollution control devices listed in Table 3; and e. Operate a DES approved temperature sensor system that continuously measures and records the combustion zone temperature.	EU01 & EU02	PO-C-362 & 363
10.	Accidental Release Program Requirements Storage of regulated chemicals at the facility, are less than the applicable threshold quantities established in 40 CFR 68.130. Administrative controls will be established in order to ensure that inventories of regulated substances are maintained below the specified threshold quantities. The facility is subject to the Purpose and General Duty clause of the 1990 Clean Air Act, Section 112(r)(1). General Duty includes the following responsibilities: a. Identify potential hazards which result from such releases using appropriate hazard assessment techniques; b. Design and maintain a safe facility; c. Take steps necessary to prevent releases; and d. Minimize the consequences of accidental releases, which do occur. If, in the future, the facility wishes to store quantities of high risk regulated substances above the threshold levels, an emergency response plan shall be submitted to the DES prior to storage above threshold quantities. This plan shall include the information listed in 40 CFR 68, Subpart E.	Facility Wide	40 CFR 68

C. Operating Practices (Env-A 3304)[6]:

After the final compliance date, the Permittee shall comply with the operating practice requirements as specified below:

1. Each MWC unit shall not be operated at loads[7] greater than 110 percent of the *maximum demonstrated load of the municipal waste combustion unit* (4-hour block average), as that term is defined in 40 CFR 60.1940.
2. Each MWC unit shall not be operated such that the temperature at the inlet of the particulate matter control device (i.e., baghouse) exceeds 17 deg.C above the *maximum demonstrated temperature of the particulate matter control device* (4-hour block average), as that term is defined in 40 CFR 60.1940.
3. The Permittee shall maintain an 8-hour block average carbon feed rate at or above the highest average level established during the most recent dioxins/furans or mercury test.
4. The Permittee shall evaluate total carbon usage for each calendar quarter. The total amount of carbon purchased and delivered to the facility must be at or above the required quarterly usage of carbon. The Permittee may choose to evaluate required quarterly carbon usage on a municipal waste combustion unit basis for each individual municipal waste combustion unit at the facility. The required quarterly usage of carbon shall be calculated using the following equations:

   Plant basis:

   $$C = \sum_{i=1}^{n} f_i * h_i \qquad \text{---------} \quad \textit{Equation (1)}$$

   Where:
   C = required quarterly carbon usage for the facility in kilograms (or pounds).
   f_i = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate).
   h_i = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours).
   n = number of municipal waste combustion units, i, located at the facility.

   Unit Basis:

   $C = f*h$ --------- *Equation (2)*

   Where:
   C = required quarterly carbon usage for the unit in kilograms (or pounds).
   f = required carbon feed rate for the municipal waste combustion unit in kilograms (or pounds) per hour. That is the average carbon feed rate during the most recent mercury or dioxins/furans stack tests (whichever has a higher feed rate).
   h = number of hours the municipal waste combustion unit was in operation during the calendar quarter (hours).

[6] Federally enforceable

[7] After the final compliance date, the Permittee shall comply with **the most stringent** of the following two operating limits (on steam production):
i. 29,500 lbs/hour/unit, calculated as a 4-hour block average, as outlined in Item #7 of Table 5b;
ii. 110% of the maximum demonstrated load of each MWC unit, calculated as a 4-hour block average, as outlined in Condition VIII.C.1

5. The municipal waste combustion unit is exempt from limits on load level, temperature at the inlet of the baghouse, and carbon feed rate during any of five situations:
   a. During the annual tests for dioxins/furans.
   b. During the annual mercury tests (for carbon feed rate requirements only).
   c. During the 2 weeks preceding the annual tests for dioxins/furans only after DES permits the facility to do any of the following five activities specified in Condition VIII.C.5.e. below.
   d. During the 2 weeks preceding the annual mercury tests (for carbon feed rate requirements only) only after DES permits the facility to do any of the following five activities specified in Condition VIII.C.5.e. below.
   e. Whenever DES permits the facility to do any of the following five activities:
      i. Evaluate system performance.
      ii. Test new technology or control technologies.
      iii. Perform diagnostic testing.
      iv. Perform other activities to improve the performance of the municipal waste combustion unit.
      v. Perform other activities to advance the state of the art for emission controls for the municipal waste combustion unit.
   f. The Permittee shall provide notification to DES for approval prior to exercising the exemption under these conditions.
6. The operating requirements of Env-A 3300 apply at all times except during periods of municipal waste combustion unit startup, shutdown, or malfunction.
7. Each startup, shutdown, or malfunction must not last for longer than 3 hours.
8. The Permittee shall comply with the facility staffing requirements specified in Env-Wm 2705.07.

D. Training and Certification (Env-A 3305)[8]:

The Permittee shall comply with the following training and certification requirements:

1. General Operator Training
   a. Operator training shall be obtained through the New Hampshire state program specified in Env-Wm 3300.
   b. The following employees of the MWC facility shall complete the operator training course required pursuant to Condition VIII.D.1.a above:
      i. Chief facility operators;
      ii. Shift supervisors; and
      iii. Control room operators.
   c. An employee specified in Condition VIII.D.1.b above shall complete the training course specified in Condition VIII.D.1.a by the later of the following dates:
      i. One year after the effective date of state plan approval[9] (i.e., April 11, 2004); or
      ii. The day before the employee assumes responsibility for operating the MWC unit or control room or for supervising the operation of the MWC unit.

[8] Federally enforceable

[9] Env-A 3300 became effective on April 11, 2003

2. Plant-Specific Operator Training
   a. The following employees of the MWC facility shall complete a plant-specific operator training course:
      i. Chief facility operators;
      ii. Shift supervisors;
      iii. Control room operators;
      iv. Ash handlers;
      v. Maintenance personnel; and
      vi. Crane or load handlers.
   b. The Permittee shall provide plant-specific training to the employees identified in Condition VIII.D.2.a., above, in accordance with the following requirements:
      i. For plant-specific training, the Permittee must do four things:
         1) For training at a particular plant, a specific operating manual for that plant shall be developed within one year after the effective date of State plan approval (i.e., by April 11, 2004).
         2) A program shall be established to review the plant-specific operating manual with people whose responsibilities affect the operation of the municipal waste combustion unit. The initial review shall be completed by the later of two dates:
            - One year after the effective date of State plan approval (i.e., April 11, 2004).
            - The date before an employee assumes responsibilities that affect operation of the municipal waste combustion unit.
         3) The manual shall be updated annually.
         4) The manual shall be reviewed with staff annually.

      ii. The Permittee must include 11 items in the operating manual for the facility:
         1) A summary of all applicable requirements in Env-A 3300.
         2) A description of the basic combustion principles that apply to municipal waste combustion units.
         3) Procedures for receiving, handling, and feeding municipal solid waste.
         4) Procedures to be followed during periods of startup, shutdown, and malfunction of the municipal waste combustion unit.
         5) Procedures for maintaining a proper level of combustion air supply.
         6) Procedures for operating the municipal waste combustion unit in compliance with the requirements contained in Env-A 3300.
         7) Procedures for responding to periodic upset or off-specification conditions.
         8) Procedures for minimizing carryover of particulate matter.
         9) Procedures for handling ash.
         10) Procedures for monitoring emissions from the municipal waste combustion unit.
         11) Procedures for recordkeeping and reporting.

      iii. The Permittee must keep the operating manual in an easily accessible location at the facility. It must be available for review or inspection by all employees who must review it and by DES.

3. Operator Certification
   a. Pursuant to RSA 149-M:6, XIII, and 40 CFR 60.1675, each chief facility operator and shift supervisor at a MWC unit shall obtain operator certification by complying with the requirements in Env-Wm 3303.
   b. Each chief facility operator and shift supervisor at a MWC unit shall obtain the certification specified in Condition VIII.D.3.a. above by the later of the following dates:
      i. One year after the effective date of state plan approval (i.e., April 11, 2004); or
      ii. Six months after the chief facility operator or shift supervisor transfers to or is hired to work at the MWC unit.
   c. To maintain certification, the trained and certified MWC operator shall complete an annual review or refresher course that meets the requirements specified in Env-Wm 3306.
   d. If all certified operators must be temporarily offsite, the MWC unit Permittee shall comply with the requirements of 40 CFR 60.1685 as specified below:
      i. If the certified chief facility operator and certified shift supervisor both are unavailable, a provisionally certified control room operator at the municipal waste combustion unit may fulfill the certified operator requirement. Depending on the length of time that a certified chief facility operator and certified shift supervisor are away, the facility must meet one of three criteria:
         1) When the certified chief facility operator and certified shift supervisor are both offsite for 12 hours or less and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, DES.
         2) When the certified chief facility operator and certified shift supervisor are offsite for more than 12 hours, but for 2 weeks or less, and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, DES. However, the facility must record the periods when the certified chief facility operator and certified shift supervisor are offsite and include the information in the annual report as specified under Item #12.b.12 of Table 11.
         3) When the certified chief facility operator and certified shift supervisor are offsite for more than 2 weeks, and no other certified operator is onsite, the provisionally certified control room operator may perform those duties without notice to, or approval by, DES. However, the Permittee must take two actions:
            - DES shall be notified in writing. In the notice, the Permittee shall state what caused the absence and what the Permittee is doing to ensure that a certified chief facility operator or certified shift supervisor is onsite.
            - A status report and corrective action summary shall be submitted to DES every 4 weeks following the initial notification. If DES notifies the facility that the status report or corrective action summary is disapproved, the municipal waste combustion unit may continue operation for 90 days, but then must cease operation. If corrective actions are taken in the 90-day period such that the DES withdraws the disapproval, municipal waste combustion unit operation may continue.

E. Emission Reductions Trading Requirements:

The Permittee did not request emissions reductions trading in its operating permit application. At this point, DES has not included any permit terms authorizing emissions trading in this permit. All emission reduction trading, must be authorized under the applicable requirements of either Env-A 3000 (the "Emissions Reductions Credits [ERCs] Trading Program"), or Env-A 3100 (the "Discrete Emissions Reductions [DERs] Trading Program") and 42 U.S.C §§7401 et seq. (the "Act"), and must be provided for in this permit.

F. Monitoring and Testing Requirements:

1. **Prior to the final compliance date** for Env-A 3300 listed in Section VIII.J , the Permittee is subject to the monitoring and testing requirements as specified below:

Table 6a - Monitoring/Testing Requirements Before the Compliance Date for Env-A 3300

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
1.	Allows for adequate dispersion of HAPs and other regulated pollutants	The Permittee shall conduct annual visual inspections of each stack and fuel-burning device. Annual inspections shall include a thorough inspection of the condition of each stack exterior and each fuel-burning device, and be focused on identifying holes, leaks, deposits, deficiencies, or deterioration of equipment and stacks. Records of inspections and subsequent maintenance, conducted as a result of the annual inspections, shall be kept on file at the facility and will be made available for review by DES and/or EPA upon request.	Annually	EU01 & EU02	Env-A 609.04 & 40 CFR 70.6(a)(3) Federally Enforceable
2.	Pressure drop	The Permittee shall conduct daily monitoring of pressure differential across each baghouse. Daily monitoring of pressure differential required by this condition shall be accomplished by daily observations of the omega gauges in the control room or the magnehelic gauges located on each unit and recordation of the pressure reading indicated by each gauge. Each reading shall be recorded in an on-site log book and shall be readily available upon request by DES/EPA.	Daily	PC01 & PC02	40 CFR 70.6(a)(3)
3.	Preventive maintenance	The Permittee shall conduct preventive maintenance necessary to ensure the operation of the baghouses in a manner consistent with manufacturer's recommendations or consistent with documented preventive maintenance schedules supported by periodic inspections and/or testing. Manufacturer's recommendations shall be kept on file at the facility and made readily available to DES/EPA upon request.	As required	PC01 & PC02	40 CFR 70.6(a)(3)
4.	Inspection	The Permittee shall conduct an annual inspection of each baghouse. The inspection shall be conducted by plant personnel familiar with the operation of the fabric filter and connected	Annual	PC01 & PC02	40 CFR 70.6(a)(3)

Table 6a - Monitoring/Testing Requirements Before the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		equipment. Records of inspections and subsequent maintenance conducted shall be kept on file at the facility for review by DES/EPA upon request.			
5.	Stack testing	The Permittee shall comply with the general compliance stack testing requirements of Env-A 802.	As required	EU01 & EU02	Env-A 802 & FP-T-0108
6.	Particulate matter, SO_2, Hydrogen Chloride & Dioxins/Furans	Stack test in accordance with DES/EPA approved methods.	Upon request by DES/EPA	EU01 & EU02	RSA 125-C
7.	NOx RACT Testing	a. The Permittee shall conduct annual stack testing, in order to demonstrate compliance with NOx RACT emission limit. b. For municipal waste incinerators, the following test methods shall be used: 1. Method 7, 7A, 7C, 7D or 7E as described in 40 CFR 60, Appendix A, to determine NOx concentrations in stack gases; 2. Method 10 as described in 40 CFR 60, Appendix A, to determine carbon monoxide concentrations in stack gases; 3. Methods 1 and 2, 2C, 2F, 2G, or 2H, 40 CFR 60, as described in Appendix A, to determine the exit flowrate of stack gases; 4. Method 3 or 3A, as described in 40 CFR 60, Appendix A, to determine carbon dioxide, oxygen, excess air and molecular weight (dry basis) of stack gases; and 5. Method 4, as described in 40 CFR 60, Appendix A, to determine volume fraction of water vapor in stack gases.	Annually	EU01 & EU02	Env-A 803.02 & RSA 125-C
8.	Opacity	COMS	Continuously	EU01 & EU02	PO-C-362 & 363
9.	CO	CEMS	Continuously	EU01 & EU02	PO-C-362 & 363
10.	Oxygen	CEMS	Continuously	EU01 & EU02	PO-C-362 & 363
11.	Combustion Temperature	DES approved temperature sensor system	Continuously	EU01 & EU02	PO-C-362 & 363
12.	Steam load	Steam flow meter	Continuously; Calculate 3-	EU01 &	PO-C-362 &

Table 6a - Monitoring/Testing Requirements Before the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
			hr rolling average	EU02	363
13.	MWC unit load	Steam flow based upon type 2 waste and 4500 BTU/hr	Continuously	EU01 & EU02	PO-C-362 & 363
14.	Temperature of the flue gas at the inlet of each baghouse	DES approved temperature sensor system	Continuously	EU01 & EU02	FP-T-0108
15.	Sulfur content of gaseous fuels	Conduct testing to determine compliance with the sulfur content limitation provisions in Env-A 1600 for gaseous fuels.	Upon request by DES/EPA	EU01 & EU02	Env-A 806.03 & FP-T-0108

2. The CEMS shall be maintained and operated in accordance with Env-A 808, *Continuous Emissions Monitoring*.

3. Pursuant to Env-A 808.03, *Minimum Specifications for CEM Systems*, the CEMS for Opacity, CO and O_2 shall meet the following minimum specifications:
   a. A CEM system for measuring gaseous emissions shall average and record the data for each calendar hour;
   b. A CEM system for measuring opacity emissions shall average the opacity data to result in consecutive, non-overlapping 6-minute averages;
   c. All CEM systems, opacity and gaseous measuring included shall:
      i. Include a means to display instantaneous values of percent opacity and gaseous emissions concentrations; and
      ii. Complete a minimum of one cycle of operation, which shall include measurement, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions and each 10-second period for systems measuring opacity, unless a longer time period is approved in accordance with Env-A 809.

4. Pursuant to Env-A 808.05, *Performance Specification Testing*, the Permittee shall conduct performance specification testing for CEMS in accordance with the following:
   a. For a CEM system monitoring opacity or gaseous emissions, the performance specification requirements of 40 CFR 60, Appendix B, shall apply;
   b. For an opacity monitoring system, the calibration error test specified in 40 CFR 60, Appendix B, Performance Specification 1, paragraph 7.1.4, shall be performed with the monitor installed on the stack or duct that is to be the permanent location for the monitor;
   c. The Division shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates; and
   d. A written report summarizing the results of the testing shall be submitted to the Division within 30 days of the completion of the test.

5. The Permittee shall prepare a CEM monitoring plan in accordance with Env-A 808.04.

6. The Permittee shall prepare a quality assurance/quality control (QA/QC) plan in accordance with Env-A 808.06.

7. The Permittee shall comply with the *General Audit Requirements* of Env-A 808.07 for all CEM systems.
8. Pursuant to Env-A 808.08, *Audit Requirements for Gaseous CEM Systems*, the Permittee shall follow the quality assurance requirements and procedures described in 40 CFR 60, Appendix F to evaluate CEMS for CO and O_2 with the following additions and clarifications for Procedure 1 of Appendix F:
   a. For a system monitoring gaseous emissions of CO and O_2, the quality assurance requirements and procedures described in 40 CFR 60, Appendix F, shall apply, with the following additions and clarifications for Procedure 1 of Appendix F:
      i. The Permittee shall inform the Division of all out of control periods, as defined in Appendix F, section 4.3, and Env-A 808.01(g), in the emission reports required pursuant to Env-A 808.11;
      ii. The Permittee may perform a RAA, as defined in 40 CFR 60, Appendix F, in place of a CGA; and
      iii. For CEM systems where CGA audits cannot be performed, the Permittee shall perform RAA audits in place of the CGA.
   b. For a time-shared gaseous CEM system, the Permittee shall perform the following audits:
      i. An annual RATA to check the analyzer at any sampling point; and
      ii. CGAs or RAAs at all sampling points for each of the remaining 3 quarterly audits.
9. The Permittee shall comply with the *Audit Requirements* of Env-A 808.09 for COMS.
10. The Permittee shall comply with the *Data Availability Requirements* of Env-A 808.10.
11. **After the final compliance date** for Env-A 3300 listed in Section VIII.J, the Permittee is subject to the monitoring and testing requirements as specified below:

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300

Item #	Parameter	Method of Compliance	Frequency of Method	Device	Regulatory Cite
1.	Allows for adequate dispersion of HAPs and other regulated pollutants	The Permittee shall conduct annual visual inspections of each stack and fuel-burning device. Annual inspections shall include a thorough inspection of the condition of each stack exterior and each fuel-burning device, and be focused on identifying holes, leaks, deposits, deficiencies, or deterioration of equipment and stacks. Records of inspections and subsequent maintenance, conducted as a result of the annual inspections, shall be kept on file at the facility and will be made available for review by DES and/or EPA upon request.	Annually	EU01 & EU02	Env-A 609.04 & 40 CFR 70.6(a)(3) Federally Enforceable
2.	Pressure drop	The Permittee shall conduct daily monitoring of pressure differential across each baghouse. Daily monitoring of pressure differential	Daily	PC01 & PC02	40 CFR 70.6(a)(3)

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		required by this condition shall be accomplished by daily observations of the omega gauges in the control room or the magnehelic gauges located on each unit and recordation of the pressure reading indicated by each gauge. Each reading shall be recorded in an on-site log book and shall be readily available upon DES/EPA request.			
3.	Preventive maintenance	The Permittee shall conduct preventive maintenance necessary to ensure the operation of the baghouses in a manner consistent with manufacturer's recommendations or consistent with documented preventive maintenance schedules supported by periodic inspections and/or testing. Manufacturer's recommendations shall be kept on file at the facility and made readily available to DES/EPA upon request.	As required	PC01 & PC02	40 CFR 70.6(a)(3)
4.	Inspection	The Permittee shall conduct an annual inspection of each baghouse. The inspection shall be conducted by plant personnel familiar with the operation of the fabric filter and connected equipment. Records of inspections and subsequent maintenance conducted shall be kept on file at the facility for review by DES/EPA upon request.	Annual	PC01 & PC02	40 CFR 70.6(a)(3)
5.	Stack testing	The Permittee shall comply with the general compliance stack testing requirements of Env-A 802.	As required	EU01 & EU02	Env-A 802 & FP-T-0108
6.	Particulate matter, Hydrogen Chloride, Dioxins/Furans, Lead, Cadmium & Fugitive Ash	Stack test in accordance with Section VIII.G .	180 days after final compliance date and annually	EU01 & EU02	Env-A 3306.02 Federally enforceable
7.	Mercury	Stack test in accordance with Section VIII.G.	Within 21 months after the issuance of FP-T-0108 and quarterly testing, alternating emission units each quarter for a period of one year. If the annual average of the quarterly testing is less than	EU01 & EU02	RSA 125-M:5 & Env-A 3306.02

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
			or equal to 0.028 mg/dscm or 85% control efficiency, annual testing may be conducted for both units.		
8.	Opacity	Stack test in accordance with Section VIII.G & CEMS	180 days after final compliance date and annually; Monitor on a continuous basis	EU01 & EU02	Env-A 3306.02 Federally enforceable
9.	SO_2	CEMS; If the Permittee prefers to use an alternative sulfur dioxide monitoring method, such as parametric monitoring, the Permittee may apply to DES for approval to use an alternative monitoring method under 40 CFR 60.13(i).	Continuously	EU01 & EU02	Env-A 3306.02 Federally enforceable
10.	CO	CEMS	Continuously	EU01 & EU02	Env-A 3306.02 Federally enforceable
11.	NOx RACT Testing	a. The Permittee shall conduct annual stack testing, in order to demonstrate compliance with NOx RACT emission limit. b. For municipal waste incinerators, the following test methods shall be used: 1. Method 7, 7A, 7C, 7D or 7E as described in 40 CFR 60, Appendix A, to determine NOx concentrations in stack gases; 2. Method 10 as described in 40 CFR 60, Appendix A, to determine carbon monoxide concentrations in stack gases; 3. Methods 1 and 2, 2C, 2F, 2G, or 2H, 40 CFR 60, as described in Appendix A, to determine the exit flowrate of stack gases; 4. Method 3 or 3A, as described in 40 CFR 60, Appendix A, to determine carbon dioxide, oxygen, excess air and molecular weight (dry basis) of stack gases; and 5. Method 4, as described in 40 CFR 60, Appendix A, to determine volume fraction of water vapor in stack gases.	Annually	EU01 & EU02	Env-A 803.02 & RSA 125-C

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
12.	Quality Assurance Requirements for COMS	The Permittee shall meet the following requirements for the continuous opacity monitoring system: a. The Permittee shall evaluate, and operate each continuous opacity monitoring system according to 40 CFR 60.13 and Env-A 808.09, *Audit Requirements for Opacity CEM Systems*. b. The annual evaluation of each continuous opacity monitoring system shall be completed no more than 13 months after the previous evaluation. c. The calibration error test specified in 40 CFR 60, Appendix B, Performance Specification 1, paragraph 7.1.4, shall be performed with the monitor installed on the stack or duct that is to be the permanent location for the monitor; d. The stack tests conducted according to EPA Reference Method 9 in Appendix A of 40 CFR 60, as specified in Condition VIII.G shall be used to determine compliance with the opacity limit in Item #3 of Table 5b. The data obtained from the continuous opacity monitoring system are not used to determine compliance with the opacity limit.	As specified	EU01 & EU02	Env-A 3306.02(c), Env-A 808.05(b) and Env-A 808.09
13.	CEMS Data for gaseous emissions [CO, SO_2 and O_2 (or CO_2)]	The Permittee shall collect a minimum amount of monitoring data with the continuous emission monitoring systems: a. Where continuous emission monitoring systems are required, 1-hour arithmetic averages shall be obtained. The averages for sulfur dioxide and carbon monoxide shall be in parts per million by dry volume at 7% oxygen (or the equivalent carbon dioxide level). The 1-hour averages of oxygen (or carbon dioxide) data from the continuous emission monitoring system shall be used to determine the actual oxygen (or carbon dioxide) level and to calculate emissions at 7% oxygen (or the equivalent carbon dioxide level). b. In order to calculate a valid 1-hour	As specified	EU01 & EU02	Env-A 3306.02(c) & Env-A 808

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		arithmetic average, the Permittee shall collect CEM data as shown below: 1. A minimum of 42 minutes of CEM readings shall be taken in any calendar hour, during which time the CEM is not in an out of control period as defined in Env-A 808.01(g), and the emission unit on which the CEM is installed is in operation; or 2. For time-shared systems, gaseous CEM concentration readings shall be collected for 75% of the total sampling time available for each emission point being monitored for those periods of time the CEM is not in an out of control period as defined by Env-A 808.01(g), and the emission unit on which the CEM is installed is in operation. c. The Permittee shall obtain valid 1-hour averages for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter. An operating day is any day the unit combusts any municipal solid waste. d. Failure to obtain the minimum data required in Item #13.a through c is a violation of the data collection requirement regardless of the emission level monitored, and the Permittee must notify DES according to Item #12.b.5 of Table 11. e. In the case where the Permittee fails to obtain the minimum data required in Item #13.a through c. above, the Permittee must still use all valid data from the continuous emission monitoring systems in calculating emission concentrations in accordance with Item #13.f. below. f. To convert 1-hour arithmetic averages into appropriate averaging times and units, the following procedures shall be followed: 1. Equation (3) of this permit			

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		shall be used to calculate emissions at 7% oxygen. 2. EPA Reference Method 19 in Appendix A of 40 CFR 60, section 12.4.3, shall be used to calculate the daily geometric average concentrations of sulfur dioxide emissions. 3. EPA Reference Method 19 in Appendix A of 40 CFR 60, section 12.4.1, shall be used to calculate the 4-hour block average for concentrations of carbon monoxide.			
14.	Minimum data specifications for CEMS & COMS	a. A CEM system for measuring gaseous emissions shall average and record the data for each calendar hour; b. A CEM system for measuring opacity emissions shall average the opacity data to result in consecutive, non-overlapping 6-minute averages; c. All CEM systems, opacity and gaseous measuring included shall: 1. Include a means to display instantaneous values of percent opacity and gaseous emissions concentrations; and 2. Complete a minimum of one cycle of operation, which shall include measurement, analyzing, and data recording for each successive 5-minute period for systems measuring gaseous emissions[10] and each 10-second period for systems measuring opacity, unless a longer time period is approved in accordance with Env-A 809.	N/A	EU01 & EU02	Env-A 808.03 & FP-T-0108
15.	CPMS	The Permittee must monitor the following three operating parameters: a. Load level of each MWC unit; b. Temperature of the flue gases at the inlet of baghouse; c. Carbon feed rate.	See Items 16, 17 & 18	EU01 & EU02	Env-A 3306.03 Federally Enforceable
16.	Steam load	a. The Permittee must calibrate, maintain, and operate a steam	Continuously	EU01 & EU02	Env-A 3306.03

[10] This is more stringent than 40 CFR 60.1750 which requires CEMS to complete at least one cycle of operation (sampling, analyzing and data recording) for each 15-minute period.

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		flowmeter or a feed water flowmeter and meet five requirements: 1. Continuously measure and record the measurements of steam (or feed water) in kilograms (or pounds) per hour. 2. Calculate the steam (or feed water) flow in 4-hour block averages. 3. Calculate the steam (or feed water) flow rate using the method in "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1--1964 (R1991)," section 4 (incorporated by reference in 40 CFR 60.17(h)(2)). 4. Design, construct, install, calibrate, and use nozzles or orifices for flow rate measurements, using the recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters," 6th Edition (1971), chapter 4 (incorporated by reference in 40 CFR 60.17(h)(3)). 5. Before each dioxins/furans stack test, or at least once a year, calibrate all signal conversion elements associated with steam (or feed water) flow measurements according to the manufacturer instructions. b. If the MWC units have shared steam systems and steam load cannot be estimated per unit, the Permittee must determine, to the satisfaction of DES, one or more operating parameters that can be used to continuously estimate load level (for example, the feed rate of municipal solid waste). The Permittee must continuously monitor the selected parameters.			Federally Enforceable

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
17.	Temperature of the flue gas at the inlet of each baghouse	The Permittee must calibrate, maintain, and operate a device (DES approved temperature sensor system) to continuously measure the temperature of the flue gas stream at the inlet of each baghouse.	Continuously	EU01 & EU02	Env-A 3306.03 Federally Enforceable
18.	Carbon feed rate for the PACIS	a. Select a carbon injection system operating parameter that can be used to calculate carbon feed rate (for example, screw feeder speed). b. During each dioxins/furans and mercury stack test, determine the average carbon feed rate in kilograms (or pounds) per hour. Also, determine the average operating parameter level that correlates to the carbon feed rate. Establish a relationship between the operating parameter and the carbon feed rate in order to calculate the carbon feed rate based on the operating parameter level. c. Continuously monitor the selected operating parameter during all periods when the municipal waste combustion unit is operating and combusting waste and <u>calculate the 8-hour block average carbon feed rate in kilograms (or pounds) per hour</u>, based on the selected operating parameter. When calculating the 8-hour block average, the Permittee must do two things: 1. Exclude hours when the municipal waste combustion unit is not operating. 2. Include hours when the municipal waste combustion unit is operating but the carbon feed system is not working correctly.	Continuously	EU01 & EU02	Env-A 3306.03 Federally Enforceable
19.	Minimum data requirements for CPMS	The Permittee shall collect minimum amount of monitoring data with the continuous parameter monitoring systems: a. Where continuous parameter monitoring systems are used, the Permittee must obtain 1-hour arithmetic averages for three parameters:	As specified	EU01 & EU02	Env-A 3306.03 Federally enforceable

Table 6b - Monitoring/Testing Requirements After the Compliance Date for Env-A 3300					
Item #	**Parameter**	**Method of Compliance**	**Frequency of Method**	**Device**	**Regulatory Cite**
		1. Load level of the municipal waste combustion unit. 2. Temperature of the flue gases at the inlet of the baghouse. 3. Carbon feed rate. b. Obtain at least two data points per hour in order to calculate a valid 1-hour arithmetic average. c. Obtain valid 1-hour averages for at least 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter. An operating day is any day the unit combusts any municipal solid waste. d. If the Permittee does not obtain the minimum data required in Item #19 a through c above, then the facility is in violation of the data collection requirement, and DES must be notified according to Item #12.b.5 of Table 11.			
20.	Sulfur content of gaseous fuels	Conduct testing to determine compliance with the sulfur content limitation provisions in Env-A 1600 for gaseous fuels.	Upon request by DES/EPA	EU01 & EU02	Env-A 806.03 & FP-T-0108
21.	Combustion Temperature	DES approved temperature sensor system	Continuously	EU01 & EU02	Env-A 609.05(a)

12. The Permittee must install, evaluate, and operate each continuous emission monitoring system according to the "Monitoring Requirements" in 40 CFR 60.13 and Env-A 808.
13. The Permittee must monitor the oxygen (or carbon dioxide) concentration at each location where sulfur dioxide and carbon monoxide are monitored.
14. The Permittee may choose to monitor carbon dioxide instead of oxygen as a diluent gas. If the Permittee chooses to monitor carbon dioxide, then an oxygen monitor is not required and the requirements in Condition VIII.F.15 below must be followed.
15. If the Permittee chooses to monitor carbon dioxide instead of oxygen as a diluent gas, a relationship between oxygen and carbon dioxide shall be established during the initial evaluation of the continuous emission monitoring systems. The relationship may be reestablished during annual evaluations. To establish the relationship the following three procedures shall be used:
    a. EPA Reference Method 3A or 3B in Appendix A of 40 CFR 60 shall be used to determine oxygen concentration at the location of the carbon dioxide monitor.
    b. At least three test runs shall be conducted for oxygen. The Permittee shall make sure each test run represents a 1-hour average and that sampling continues for at least 30 minutes in each hour.

c. The fuel-factor equation in EPA Reference Method 3B in Appendix A of 40 CFR 60 shall be used to determine the relationship between oxygen and carbon dioxide.

16. The Permittee shall follow the following schedule for evaluating continuous emission monitoring systems:
    a. The annual evaluations of the continuous emission monitoring systems shall be conducted no more than 13 months after the previous evaluation was conducted.
    b. The continuous emission monitoring systems shall be evaluated daily and quarterly as specified in Appendix F of 40 CFR 60.

17. In order to make sure that the continuous emission monitoring systems are operating correctly, the Permittee shall perform the following:
    a. The Permittee shall conduct initial, daily, quarterly, and annual evaluations of the sulfur dioxide continuous emission monitoring system. The Permittee shall complete the initial evaluation within 180 days after the initial startup of the equipment (as required by Env-A 808.05(c)) or within 180 days of final compliance date (as required by Env-A 3306.02(c)), whichever is earlier.
    b. The Permittee shall conduct daily, quarterly, and annual evaluations of the continuous emission monitoring systems that measure oxygen (or carbon dioxide) and carbon monoxide.
    c. For initial and annual evaluations, data shall be collected concurrently (or within 30 to 60 minutes) using the oxygen (or carbon dioxide) continuous emission monitoring system, sulfur dioxide, or carbon monoxide continuous emission monitoring systems, as appropriate, and the appropriate test methods specified in Table 7 of this permit. The data shall be collected during each initial and annual evaluation of the continuous emission monitoring systems following the applicable performance specifications in Appendix B of 40 CFR 60. Table 8 of this permit shows the performance specifications that apply to each continuous emission monitoring system.

Table 7 - Requirements for Validating CEMS

For the following CEMS	Use the following methods in Appendix A of 40 CFR 60 to validate pollutant concentration levels	Use the following methods in Appendix A of 40 CFR 60 to measure oxygen (or carbon dioxide)
Sulfur dioxide	Method 6 or 6C	Method 3 or 3A
Carbon monoxide	Method 10, 10A, or 10B	Method 3 or 3A

    d. The quality assurance procedures in Procedure 1 of Appendix F of 40 CFR 60 for each continuous emission monitoring system shall be followed. The procedures include daily calibration drift and quarterly accuracy determinations.
    e. The Permittee shall comply with the following requirements of Env-A 808.07, *General Audit Requirements for All CEM Systems*:
        i. Required quarterly audits shall be done anytime during each calendar quarter, but successive quarterly audits shall occur no more than 4 months apart.
        ii. Within 30 calendar days following the end of each quarter, the Permittee shall submit to the Division a written summary report of the results of all required audits that were performed in that quarter, in accordance with the following:
            1) For gaseous CEM audits, the report format shall conform to that presented in 40 CFR 60, Appendix F, Procedure 1, section 7; and

2) For opacity CEM audits, the report format shall conform to that presented in EPA-600/8-87-025, April 1992, "Technical Assistance Document: Performance Audit Procedures for Opacity Monitors".

iii. The Permittee shall notify the Division at least 30 days prior to the performance of a RATA.

iv. The Division shall require the rescheduling of any RATA if the staff necessary to observe the audit are not available.

v. The Permittee shall provide at least 2 weeks' notice prior to any other planned audit or test procedure.

f. Pursuant to Env-A 808.08, *Audit Requirements for Gaseous CEM Systems*, the Permittee shall follow the quality assurance requirements and procedures described in 40 CFR 60, Appendix F to evaluate CEMS for SO_2, CO and O_2[11] or CO_2, with the following additions and clarifications for Procedure 1 of Appendix F:

i. The Permittee shall inform the Division of all out of control periods, as defined in Appendix F, section 4.3, and Env-A 808.01(g), in the emission reports required pursuant to Env-A 808.11;

ii. The Permittee may perform a RAA, as defined in 40 CFR 60, Appendix F, in place of a CGA; and

iii. For CEM systems where CGA audits cannot be performed, the Permittee shall perform RAA audits in place of the CGA.

g. For a time-shared gaseous CEM system, the Permittee shall perform the following audits:

i. An annual RATA to check the analyzer at any sampling point; and

ii. CGAs or RAAs at all sampling points for each of the remaining 3 quarterly audits.

18. Pursuant to Env-A 808.05, the Division shall be notified of the date or dates of the performance specification testing at least 30 days prior to the scheduled dates and a written report summarizing the results of the testing shall be submitted to the Division within 30 days of the completion of the test.

19. The Permittee shall use the required span values and applicable performance specifications for the continuous emission monitoring systems and continuous opacity monitoring system as specified in Table 8.

[11] 40 CFR 60.1735 (incorporated by reference in Env-A 3306.02(c)) exempts the O_2 or CO_2 CEMS from the following two requirements:

i. Section 2.3 of Performance Specification 3 in Appendix B of 40 CFR 60 (relative accuracy requirement).

ii. Section 5.1.1 of Appendix F of 40 CFR 60 (relative accuracy test audit).

However, Env-A 808.08 requires the Permittee to perform an annual RATA on the O_2 or CO_2 CEMS. Hence, the Permittee shall comply with Conditions VIII.F.17.f & g because they are more stringent than 40 CFR 60.1735.

Table 8 - Requirements for CEMS			
For the following pollutants	**Use the following span values for CEMS**	**Use the following performance specifications in Appendix B of 40 CFR 60 for CEMS**	**If needed to meet data requirements, the following alternate methods in Appendix A of 40 CFR 60 shall be used to collect data**
Opacity	100% Opacity	PS 1	Method 9
SO_2	Inlet to control device: 125 percent of the maximum expected hourly potential SO_2 emissions of the MWC unit. Control device outlet: 50% of the maximum expected hourly potential SO_2 emissions of the MWC unit.	PS 2	Method 6C
CO	125% of the maximum expected hourly potential carbon monoxide emissions of the MWC unit.	PS 4A	Method 10 with alternative interference trap
O_2 or CO_2	25% oxygen or 25% carbon dioxide.	PS 3	Method 3A or 3B

20. In case when any of the continuous emission monitoring systems are temporarily unavailable to meet the data collection requirements, the Permittee shall refer to Table 8 above. It shows alternate methods for collecting data when systems malfunction or when repairs, calibration checks, or zero and span checks keep the Permittee from collecting the minimum amount of data.

21. The Permittee shall prepare a CEM monitoring plan in accordance with Env-A 808.04.

22. The Permittee shall prepare a quality assurance/quality control (QA/QC) plan in accordance with Env-A 808.06.

23. The Permittee shall comply with the *Data Availability Requirements* of Env-A 808.10.

G. Stack Testing Requirements:

The Permittee shall comply with the following stack testing requirements of Env-A 3306.02 **after the final compliance date**:

1. Each annual stack test for the following pollutants shall be conducted no later than 13 months after the previous stack test.
   a. Particulate matter;
   b. Opacity;
   c. Cadmium;
   d. Lead;
   e. Mercury (quarterly tests are needed pursuant to Item #7 of Table 6b);
   f. Hydrogen chloride;
   g. Dioxins/furans; and
   h. Fugitive ash.

2. The Permittee shall use the following test methods to stack test:

a. Table 9 of this permit shall be followed to establish the sampling location and to determine pollutant concentrations, number of traverse points, individual test methods, and other specific testing requirements for the different pollutants.

Table 9 - Requirements for Stack Tests

To measure the following pollutants	Use the following methods in Appendix A of 40 CFR 60 to determine the sampling location	Use the following methods in Appendix A of 40 CFR 60 to measure pollutant concentration	Also note the following additional information
Organics Dioxins/Furans	Method 1	Method 23[12]	The minimum sampling time must be 4 hours per test run while the MWC unit is operating at full load
Metals Cadmium Lead Mercury	Method 1	Method 29[12]	Compliance testing must be performed while the MWC unit is operating at full load.
Opacity	Method 9	Method 9	Use Method 9 to determine compliance with opacity limits. 3-hour observation period (thirty 6-minute averages).
Particulate Matter	Method 1	Method 5 or 29	The minimum sample volume must be 1.0 cubic meter. The probe and filter holder heating systems in the sample train must beset to provide a gas temperature no greater than 160±14 ^{o}C. The minimum sampling time is 1 hour.
Acid Gases[13] Hydrogen Chloride	Method 1	Method 26 or 26A[12]	Test runs must be at least 1 hour long while the MWC unit is operating at full load.
Other Fugitive Ash	Not applicable	Method 22 (visible emissions)	The three 1-hour observation period must include periods when the facility transfers fugitive ash from the MWC unit to the area where the fugitive ash is stored or loaded into containers or trucks.

b. The Permittee shall make sure that stack tests for all the pollutants consist of at least three test runs, as specified in 40 CFR 60.8. The average of the pollutant emission concentrations from the three test runs shall be used to determine compliance with the emission limits specified in Table 5b of this permit.

c. An oxygen (or carbon dioxide) measurement shall be obtained at the same time as the pollutant measurements to determine diluent gas levels.

d. The following equations (3), (4) & (5) shall be used respectively to calculate emission levels at 7% oxygen (or an equivalent carbon dioxide basis), the percent reduction in potential hydrogen chloride emissions, and the reduction efficiency for mercury emissions. The Permittee shall refer to individual test methods in Table 9 of this permit for other required equations.

Concentration correction to 7 percent oxygen:

[12] Must simultaneously measure oxygen (or carbon dioxide) using Method 3A or 3B in Appendix A of 40 CFR 60.

[13] CEMS shall be used to test sulfur dioxide and carbon monoxide. Stack tests are not required except for quality assurance requirements in Appendix F of 40 CFR 60.

$$C_{7\%} = C_{unc} * (13.9)* [1/(20.9-C_{O2})] \text{ --------- } \textit{Equation (3)}$$

Where:
$C_{7\%}$ = concentration corrected to 7 percent oxygen
C_{unc} = uncorrected pollutant concentration
C_{O2} = concentration of oxygen (percent)

Percent reduction in potential mercury emissions:

$$\%P_{Hg} = (E_i - E_o) * (100/E_i) \text{ --------- } \textit{Equation (4)}$$

Where:
$\%P_{Hg}$ = percent reduction of potential mercury emissions
E_i = mercury emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis
E_o = mercury emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis

Percent reduction in potential hydrogen chloride emissions:

$$\%P_{HCl} = (E_i - E_o) * (100/E_i) \text{ --------- } \textit{Equation (5)}$$

Where:
$\%P_{HC1}$ = percent reduction of the potential hydrogen chloride emissions
E_i = hydrogen chloride emission concentration as measured at the air pollution control device inlet, corrected to 7 percent oxygen, dry basis
E_o = hydrogen chloride emission concentration as measured at the air pollution control device outlet, corrected to 7 percent oxygen, dry basis.

e. The Permittee may apply to DES for approval under 40 CFR 60.8(b) to use a reference method with minor changes in methodology, use an equivalent method, use an alternative method the results of which DES has determined are adequate for demonstrating compliance, waive the requirement for a performance test because the Permittee has demonstrated by other means that the MWC units are in compliance, or use a shorter sampling time or smaller sampling volume.

3. The Permittee may conduct stack testing less often provided the following conditions are met:
   a. If all stack tests for a given pollutant over 3 consecutive years show that the MWC unit(s) comply with the emission limit. In that case, the Permittee is not required to conduct a stack test for that pollutant for the next 2 years. However, the Permittee must conduct another stack test within 36 months of the anniversary date of the third consecutive stack test that shows the MWC unit(s) comply with the emission limit. Thereafter, the Permittee must perform stack tests every 3rd year but no later than 36 months following the previous stack tests. If a stack test shows noncompliance with an emission limit, the Permittee must conduct annual stack tests for that pollutant until all stack tests over 3 consecutive years show compliance with the emission limit for that pollutant. The provision applies to all pollutants subject to stack testing requirements: dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash.
   b. The Permittee may test less often for dioxins/furans emissions if the municipal waste combustion units have demonstrated levels of dioxins/furans emissions less than or equal to 30 nanograms per dry standard cubic meter (total mass), for 2 consecutive

years. In that case, the Permittee may choose to conduct annual stack tests on only one municipal waste combustion unit per year at the facility. The provision only applies to stack testing for dioxins/furans emissions.

i. The Permittee shall conduct the stack test no more than 13 months following a stack test on any municipal waste combustion unit at the facility. Each year, a different municipal waste combustion unit shall be tested and all municipal waste combustion units shall be tested in a sequence that the Permittee determines. Once a testing sequence is determined, it must not be changed without approval by DES.

ii. If each annual stack test shows levels of dioxins/furans emissions less than or equal to 30 nanograms per dry standard cubic meter (total mass) for MWC units, the Permittee may continue stack tests on only one municipal waste combustion unit.

iii. If any annual stack test indicates levels of dioxins/furans emissions greater than 30 nanograms per dry standard cubic meter (total mass) for MWC units, the Permittee shall conduct subsequent annual stack tests on all municipal waste combustion units at the facility. The Permittee may return to testing one municipal waste combustion unit per year if dioxins/furans emissions levels less than or equal to 30 nanograms per dry standard cubic meter (total mass), can be demonstrated for all municipal waste combustion units at the facility for 2 consecutive years.

4. The Permittee may not deviate from the 13-month testing schedules specified in Conditions VIII.G.1 and VIII.G.3.b.i unless the Permittee applies to DES for an alternative schedule, and DES approves the request for alternate scheduling prior to the date on which the facility would otherwise have been required to conduct the next stack test.

5. At the performance testing conducted pursuant to Item #7 of Table 6b, the Permittee shall conduct optimization tests to determine the optimized carbon feed rate of the powder activated carbon injection system for which the mercury emissions are optimally minimized below the applicable limits. The optimized carbon feed rate is the carbon feed rate that achieves the greatest reduction of mercury emissions per pound of carbon used. Specifically, when the carbon feed rate versus the amount of mercury emission reductions is plotted graphically, the optimized carbon feed rate is chosen as the point of deflection in the optimization curve where an incremental increase in feed rate does not proportionally increase mercury removal.

H. Recordkeeping Requirements:

The Permittee shall be subject to the recordkeeping requirements identified in Table 10 below:

Table 10 - Applicable Recordkeeping Requirements

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Cite.
1.	a. The Permittee shall retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination. b. The Permittee shall keep all records onsite in paper copy or electronic format unless DES/EPA approves another format. c. The Permittee shall make all records available for submittal to DES/EPA, or for onsite review by an inspector.	Retain for a minimum of 5 years	Facility Wide	40 CFR 70.6(a)(3)(ii)(B) & Env-A 3307.02(a)
2.	The Permittee shall maintain the following records: a. Summary of preventive maintenance and inspection results for stacks and fuel burning devices conducted in accordance with Item #1 of Tables 6a & 6b. b. Records of NOx RACT testing conducted in accordance with Item #7 of Table 6a and Item #11 of Table 6b. c. Records of stack testing for PM, SO_2, HCl, Dioxins/Furans and Metals.	Maintain on a continuous basis	EU01 & EU02	40 CFR 70.6(a)(3)(iii)(A)
3.	The Permittee shall maintain annual records of actual emissions for each significant and insignificant activity for determination of emission based fees.	Maintain at facility at all times	Significant and insignificant activities	Env-A 704.03 Federally Enforceable
4.	<u>General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems:</u> The Permittee shall maintain records for the continuous emission monitoring systems in accordance with Env-A 800 and all applicable federal regulations.	Maintain on a continuous basis	EU01 & EU02	Env-A 903.04 & FP-T-0108
5.	The Permittee shall record the daily charging rates and hours of operation for each MWC unit.	Daily	EU01 & EU02	40 CFR 60.53
6.	<u>General Recordkeeping Requirements for Combustion Devices Consuming Waste:</u> The Permittee shall record and maintain the following information for fuel burning devices consuming waste: a. Amount of waste consumed; b. Type of waste consumed; and c. Hours of operation of each combustion device.	Monthly	EU01 & EU02	Env-A 903.03 & FP-T-0108
7.	<u>General Recordkeeping Requirements for Combustion Devices Consuming Propane:</u> a. Amount of fuel consumed; b. Type of fuel consumed; and c. Sulfur content as percent sulfur by weight of fuel or in grains per 100 cubic feet of fuel.	Monthly	EU01 & EU02	Env-A 903.03 & FP-T-0108

Table 10 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Cite.**
8.	General NO_x Recordkeeping The Permittee shall record the following information and maintain such records at the facility: a. Identification of each combustion device; b. Operating schedule during the *high ozone season*, (June 1 through August 31) for each combustion device identified in Item #8.a. above, including: 1. Hours of operation per calendar month; 2. Days of operation per calendar month; 3. Number of weeks of operation; 4. Type and amount of fuel burned for each combustion device; 5. Heat input rate in tons per hour; 6. The actual NO_x emissions from each combustion device for the calendar year in tons and a high ozone day in pounds per day during that calendar year; and 7. The emission factors and the origin of the emission factors used to calculate the NO_x emissions.	On a continuous basis	EU01 & EU02	Env-A 905.02 & FP-T-0108
9.	Air Pollution Control Device Operational Records: The Permittee shall record and maintain records of all malfunctions, routine maintenance, and other downtimes of any air pollution control equipment in whole or part. These records must be available for review by DES/EPA upon request.	At each occurrence	PC01, PC02, PC03, PC04, PC05, PC06, PC07, PC08, PC09	Env-A 906.01 & FP-T-0108
10.	Pressure Differential Across Baghouse Units: The Permittee shall record each reading of the pressure differential across each baghouse in an on-site logbook. This logbook shall be readily available upon DES/EPA request.	Daily	PC01 & PC02	Env-A 906.01 & FP-T-0108
11.	Baghouse Inspection Maintenance Records: The Permittee shall maintain records of annual inspections and subsequent maintenance of each baghouse on file at the facility for review by DES/EPA upon request.	Annually	PC01& PC02	Env-A 906.01 & FP-T-0108
12.	Prior to the final compliance date, the Permittee shall maintain monthly lime usage records for DLIS.	Monthly	PC03 & PC04	Env-A 906.01 & FP-T-0108
13.	The Permittee shall keep the following records for operator training and certification: a. Records of provisional certifications. The following three items shall be included: 1. For the municipal waste combustion facility, names of the chief facility operator, shift supervisors and control room operators who are provisionally certified by New Hampshire-approved certification program (Env-Wm 3300). 2. Dates of the initial provisional certifications. 3. Documentation showing current provisional certifications. b. Records of full certifications. The following three items	On a continuous basis	EU01 & EU02	Env-A 3307.02(a) Federally Enforceable

Table 10 - Applicable Recordkeeping Requirements

Item #	Applicable Recordkeeping Requirement	Records Retention/ Frequency	Applicable Emission Unit	Regulatory Cite.
	shall be included: 1. For the municipal waste combustion facility, names of the chief facility operator and shift supervisors who are fully certified by New Hampshire-approved certification program (pursuant to Condition VIII.D.3). 2. Dates of initial and renewal full certifications. 3. Documentation showing current full certifications. c. Records showing completion of the operator training course. The following three items shall be included: 1. For the municipal waste combustion facility, names of the chief facility operator, shift supervisors, and control room operators who have completed New Hampshire State municipal waste combustion operator training course (pursuant to Condition VIII.D.1). 2. Dates of completion of the operator training course. 3. Documentation showing completion of operator training course. d. Records of reviews for plant-specific operating manuals. The following three items shall be included: 1. Names of persons who have reviewed the operating manual. 2. Date of the initial review. 3. Dates of subsequent annual reviews. e. Records of when a certified operator is temporarily offsite. The following two items shall be included: 1. If the certified chief facility operator and certified shift supervisor are offsite for more than 12 hours, but for 2 weeks or less, and no other certified operator is onsite, the dates that the certified chief facility operator and certified shift supervisor were offsite shall be recorded. 2. When all certified chief facility operators and certified shift supervisors are offsite for more than 2 weeks and no other certified operator is onsite, the following four items shall be recorded: i. A notice that all certified persons are offsite. ii. The conditions that cause those people to be offsite. iii. The corrective actions the facility is taking to ensure a certified chief facility operator or certified shift supervisor is onsite. iv. Copies of the written reports submitted every 4 weeks that summarize the actions taken to ensure that a certified chief facility operator or certified shift supervisor will be onsite. f. Records of calendar dates. The calendar dates shall be included on each record.			
In addition to the above, the Permittee shall comply with the following recordkeeping requirements **after the final compliance date** for Env-A 3300:				
14.	For initial and annual stack tests required under Table 6b & Condition VIII.G, the Permittee shall keep records of four items: a. The results of the stack tests for the following eight pollutants or parameters:	On a continuous basis	EU01 & EU02	Env-A 3307.02 Federally Enforceable

Table 10 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Cite.**
	1. Dioxins/furans 2. Cadmium 3. Lead 4. Mercury 5. Opacity 6. Particulate matter 7. Hydrogen chloride 8. Fugitive ash b. Test reports including supporting calculations that document the results of all stack tests. c. The maximum demonstrated load of the municipal waste combustion units and maximum temperature at the inlet of the baghouse during all stack tests for dioxins/furans emissions. d. The calendar date of each record.			
15.	The Permittee shall keep the following records for the <u>continuously monitored pollutants or parameters</u> a. Records of monitoring data: The five parameters measured using continuous monitoring systems shall be documented: 1. All 6-minute average levels of opacity. 2. All 1-hour average concentrations of sulfur dioxide emissions. 3. All 1-hour average concentrations of carbon monoxide emissions. 4. All 1-hour average load levels of the MWC unit(s). 5. All 1-hour average flue gas temperatures at the inlet of the baghouse. b. Records of average concentrations: 1. All 24-hour daily block geometric average concentrations of sulfur dioxide emissions. 2. All 4-hour block arithmetic average concentrations of carbon monoxide emissions. 3. All 4-hour block arithmetic average load levels of the municipal waste combustion units. 4. All 4-hour block arithmetic average flue gas temperatures at the inlet of the baghouse. c. Records of exceedances: The following three items shall be documented: 1. Calendar dates whenever any of the four pollutant or parameter levels recorded in Item #15.b. above or the opacity level recorded in Item #15.a.1. did not meet the emission limits or operating levels specified in this permit. 2. Reasons the MWC units exceeded the applicable emission limits or operating levels. 3. Corrective actions the Permittee took or is taking to meet the emission limits or operating levels. d. Records of minimum data: The following three items shall be documented: 1. Calendar dates for which the Permittee did not collect the minimum amount of data required under Items 13	On a continuous basis	EU01 & EU02	Env-A 3307.02 Federally Enforceable

Table 10 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Cite.**
	and 19 of Table 6b. Dates for four types of pollutants and parameters shall be recorded: i. Sulfur dioxide emissions. ii. Carbon monoxide emissions. iii. Load levels of the MWC unit(s). iv. Temperatures of the flue gases at the inlet of the baghouse. 2. Reasons for not collecting the minimum data. 3. Corrective actions the Permittee took or is taking to obtain the required amount of data. e. Records of exclusions: The Permittee shall document any exclusions of data from the calculation of averages for any of the following four pollutants or parameters and the reasons the data were excluded: 1. Sulfur dioxide emissions. 2. Carbon monoxide emissions. 3. Load levels of the municipal waste combustion unit(s). 4. Temperatures of the flue gases at the inlet of the baghouse. f. Records of drift and accuracy: The Permittee shall document the results of daily drift tests and quarterly accuracy determinations according to Procedure 1 of Appendix F of 40 CFR 60. The Permittee shall keep these records for sulfur dioxide and carbon monoxide continuous emissions monitoring systems. g. Records of the relationship between oxygen and carbon dioxide: If the Permittee chooses to monitor carbon dioxide instead of oxygen as a diluent gas, then the relationship between oxygen and carbon dioxide, as specified in Condition VIII.F.15 shall be established. h. Records of calendar dates: The Permittee shall include the calendar date on each record.			
16.	The Permittee shall keep the following five records for <u>the usage of activated carbon</u>: a. Records of average carbon feed rate: The following five items shall be documented: 1. Average carbon feed rate in kilograms (or pounds) per hour during all stack tests for dioxins/furans and mercury emissions. All supporting calculations shall be included in the records. 2. For the operating parameter chosen to monitor carbon feed rate, average operating level during all stack tests for dioxins/furans and mercury emissions. The supporting data that document the relationship between the operating parameter and the carbon feed rate shall be included. 3. All 8-hour block average carbon feed rates in kilograms (or pounds) per hour calculated from the monitored operating parameter. 4. Total carbon purchased and delivered to the facility for each calendar quarter. If the Permittee chooses to	On a continuous basis	EU01 & EU02	Env-A 3307.02 Federally Enforceable

Table 10 - Applicable Recordkeeping Requirements				
Item #	**Applicable Recordkeeping Requirement**	**Records Retention/ Frequency**	**Applicable Emission Unit**	**Regulatory Cite.**
	evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, the total carbon purchased and delivered for each individual municipal waste combustion unit at the facility shall be recorded. The supporting documentation shall be included. 5. Required quarterly usage of carbon for facility, calculated using equations (1) and (2). If the Permittee chooses to evaluate required quarterly usage for carbon on a MWC unit basis, the required quarterly usage for each MWCunit at the facility shall be recorded. The supporting calculations shall be included. b. Records of low carbon feed rates: The following three items shall be documented: 1. The calendar dates when the average carbon feed rate over an 8-hour block was less than the average carbon feed rates determined during the most recent stack test for dioxins/furans or mercury emissions (whichever has a higher feed rate). 2. Reasons for the low carbon feed rates. 3. Corrective actions the Permittee took or is taking to meet the 8-hour average carbon feed rate requirement. c. Records of minimum carbon feed rate data: The following three items shall be documented: 1. Calendar dates for which the Permittee did not collect the minimum amount of carbon feed rate data required under Item #19 of Table 6b. 2. Reasons for not collecting the minimum data. 3. Corrective actions the Permittee took or are taking to get the required amount of data. d. Records of exclusions: The Permittee shall document any exclusions of data from the calculation of average carbon feed rates and the reasons the data were excluded. e. Records of calendar dates. The calendar date on each record shall be included.			

I. Reporting Requirements:

The Permittee shall be subject to the reporting requirements identified in Table 11 below:

Table 11 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
1.	Any report submitted to the DES and/or EPA shall include the certification of accuracy statement outlined in Section XXI.B. of this Permit and shall be signed by the responsible official.	As specified in Section XXI. B.	Facility Wide	40 CFR 70.6(c)(1)
2.	Semi-annual Permit Deviation and Monitoring Report The Permittee shall submit a summary report of monitoring data including the following: a. Summary of maintenance and inspection results for stacks and fuel burning devices; b. Permit deviations.	Semiannually (by July 31st and January 31st of each calendar year)	Facility Wide	40 CFR 70.6(a)(3)(iii)(A)
3.	NO_x Reporting Requirements The Permittee shall submit to the Director, annually (no later than April 15th of the following year), a report of data required by Item #8 of Table 10, including total annual quantities of all NO_x emissions.	Annually (no later than April 15th of the following year)	EU01 & EU02	Env-A 909 & FP-T-0108
4.	Prompt reporting of deviations from Permit requirements shall be conducted in accordance with Section XXVIII of this Permit.	Prompt reporting (within 24 hours of an occurrence)	Facility Wide	40 CFR 70.6(a)(3)(iii)(B)
5.	Annual reporting and payment of emission-based fees for pollutants, including but not limited to SO_2, NO_x, CO, TSP, and VOCs, shall be conducted in accordance with Section XXIII of this Permit.	Annually (no later than April 15th & October 15th of the following year respectively)	Facility Wide	Env-A 704.03 Federally Enforceable
6.	The Permittee shall submit an annual emissions report which shall include the following information: a. The actual emissions of the facility and the methods used in calculating such emissions in accordance with Env-A 704.02; b. For combustion devices, all information required by Items 6 & 7 of Table 10; and c. Actual emissions speciated by individual regulated air pollutants including a breakdown of VOC emissions by compound.	Annually (no later than April 15th of the following year)	Facility Wide	Env-A 907.01 & FP-T-0108
7.	Annual compliance certification shall be submitted in accordance with Section XXI of this Permit.	Annually (no later than April 15th of the following year)	Facility Wide	40 CFR 70.6(c)(1)
8.	The Permittee shall submit quarterly emission reports for the gaseous and opacity measuring CEMS.	Within 30 days at the end of each quarter	EU01 & EU02	Env-A 808.11, Env-A 808.13 & FP-T-0108

Table 11 - Applicable Reporting Requirements				
Item #	**Reporting Requirements**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
9.	Prior to the final compliance date, the Permittee shall also include the following two items in the quarterly reports required by Item #4 above: a. Monthly quantities of lime used for the DLIS. b. Pounds of lime used per 1000 lbs of steam produced.	Quarterly	EU01 & EU02	Env-A 910 & FP-T-0108
In addition to the above, the Permittee shall comply with the following reporting requirements **after the final compliance date** for Env-A 3300:				
10.	The Permittee shall keep a copy of all reports required by Items 11, 12 & 13 of Table 11 onsite for 5 years.	N/A	EU01 & EU02	Env-A 3307.02(b)
11.	Initial compliance report a. As specified in 40 CFR 60.7(c), the Permittee shall submit initial report by 180 days after the final compliance date. b. The Permittee shall include the following in the initial report: 1. The emission levels measured on the date of the initial evaluation of the continuous emission monitoring systems for all of the following four pollutants or parameters as recorded in accordance with Item #15b of Table 10. i. The 24-hour daily geometric average concentration of sulfur dioxide emissions. ii. The 4-hour block arithmetic average concentration of carbon monoxide emissions. iii. The 4-hour block arithmetic average load level of the MWC unit(s). iv. The 4-hour block arithmetic average flue gas temperature at the inlet of the baghouse. 2. The results of the initial stack tests for the following eight pollutants or parameters: i. Dioxins/furans ii. Cadmium iii. Lead iv. Mercury v. Opacity vi. Particulate matter vii. Hydrogen chloride viii. Fugitive ash 3. The test report that documents the initial stack tests including supporting calculations. 4. The initial performance evaluation of the continuous emissions monitoring systems. The applicable performance specifications in Appendix B of 40 CFR 60 shall be used in conducting the evaluation. 5. The maximum demonstrated load of the MWC unit(s) and the maximum demonstrated temperature of the flue gases at the inlet of the baghouse. The values established during the initial stack test for dioxins/furans emissions shall be used and supporting calculations shall be included.	Within 180 days after the final compliance date	EU01 & EU02	Env-A 3307.02(b) Federally Enforceable

Table 11 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	6. The average carbon feed rates that was recorded during the initial stack tests for dioxins/furans and mercury emissions. Supporting calculations as specified in Items 16.a.1 and a.2 of Table 10 shall be included. 7. If the Permittee chooses to monitor carbon dioxide instead of oxygen as a diluent gas, documentation of the relationship between oxygen and carbon dioxide, as specified in Condition VIII.F.15.			
12.	Annual Reports: a. The annual report shall be submitted no later than February 1 of each year that follows the calendar year in which the data was collected. b. The Permittee shall include in the annual report a summary of data collected for all pollutants and parameters regulated under Env-A 3300. The summary shall include twelve items: 1. The results of the annual stack test for the following eight pollutants,: i. Dioxins/furans ii. Cadmium iii. Lead iv. Mercury v. Opacity vi. Particulate matter vii. Hydrogen chloride viii. Fugitive ash 2. A list of the highest average levels recorded, in the appropriate units. The Permittee shall list those values for four pollutants or parameters: i. Sulfur dioxide emissions. ii. Carbon monoxide emissions. iii. Load level of the MWC unit(s). iv. Temperature of the flue gases at the inlet of the baghouse (4-hour block average). 3. The highest 6-minute opacity level measured: The value shall be based on all 6-minute average opacity levels recorded by the continuous opacity monitoring system pursuant to Item #15.a.1 of Table 10. 4. The Permittee shall include the following four records for the usage of activated carbon: i. The average carbon feed rates recorded during the most recent dioxins/furans and mercury stack tests. ii. The lowest 8-hour block average carbon feed rate recorded during the year. iii. The total carbon purchased and delivered to the facility for each calendar quarter. If the Permittee chooses to evaluate total carbon purchased and delivered on a municipal waste combustion unit basis, the total carbon purchased and delivered for each individual MWC unit at the facility shall be recorded. iv. The required quarterly carbon usage for the MWC plant calculated using equations 1 or 2 of this	February 1 of each year	EU01 & EU02	Env-A 3307.02(b) Federally Enforceable

Table 11 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	permit. If the Permittee chooses to evaluate required quarterly usage for carbon on MWC unit basis, the required quarterly usage for each MWC unit at the facility shall be recorded. 5. The total number of days that the Permittee did not obtain the minimum number of hours of data for five pollutants or parameters. The reasons for not obtaining the data and corrective actions taken by the facility to obtain the data in the future shall be included. Data on the following items shall be included: i. Sulfur dioxide emissions. ii. Carbon monoxide emissions. iii. Load level of the MWC unit(s). iv. Temperature of the flue gases at the inlet of the baghouse. v. Carbon feed rate. 6. The number of hours the Permittee has excluded data from the calculation of average levels (the reasons for excluding it shall be included). Data for the following five pollutants or parameters shall be included: i. Sulfur dioxide emissions. ii. Carbon monoxide emissions. iii. Load level of the MWC unit(s). iv. Temperature of the flue gases at the inlet of the baghouse. v. Carbon feed rate. 7. A notice of facility's intent to begin a reduced stack testing schedule for dioxins/furans emissions during the following calendar year if the facility is eligible for alternative scheduling. 8. A notice of facility's intent to begin a reduced stack testing schedule for other pollutants during the following calendar year if the facility is eligible for alternative scheduling. 9. A summary of any emission or parameter level that did not meet the limits specified in this permit. 10. A summary of the data in Item #12.b.1 through b.4 of this Table from the year preceding the reporting year which gives DES a summary of the performance of the MWC unit(s) over a 2-year period. 11. If the Permittee chooses to monitor carbon dioxide instead of oxygen as a diluent gas, documentation of the relationship between oxygen and carbon dioxide, as specified in Condition VIII.F.15. 12. Documentation of periods when all certified chief facility operators and certified shift supervisors are offsite for more than 12 hours.			
13.	<u>Semi-annual Reports</u> a. The Permittee shall submit a semiannual report on any recorded emission or parameter level that does not meet the requirements specified in this permit.	February 1st and August 1st	EU01 & EU02	Env-A 3307.02(b) Federally Enforceable

Table 11 - Applicable Reporting Requirements

Item #	Reporting Requirements	Frequency of Reporting	Applicable Emission Unit	Regulatory Cite
	b. The Permittee shall submit semiannual reports according to the following schedule: 1. For data collected during the first half of a calendar year, the semiannual report shall be submitted by August 1 of that year. 2. For data collected during the second half of the calendar year, the semiannual report shall be submitted by February 1 of the following year. c. The Permittee shall include the following three items in the semiannual out-of-compliance reports: 1. For any of the following five pollutants or parameters that exceeded the limits specified in this permit, the calendar date they exceeded the limits, the averaged and recorded data for that date, the reasons for exceeding the limits, and the corrective actions taken by the facility shall be included: i. Concentration of sulfur dioxide emissions. ii. Concentration of carbon monoxide emissions. iii. Load level of the MWC unit(s). iv. Temperature of the flue gases at the inlet of the baghouse. v. Average 6-minute opacity level; Data obtained from the continuous opacity monitoring system are not used to determine compliance with the limit on opacity emissions. 2. If the results of annual stack tests show emissions above the limits specified in Table 5b as applicable for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, hydrogen chloride, and fugitive ash, a copy of the test report that documents the emission levels and corrective actions taken by the facility shall be included. 3. The following two items shall be included regarding the use of activated carbon to control dioxins/furans or mercury emissions: i. Documentation of all dates when the 8-hour block average carbon feed rate (calculated from the carbon injection system operating parameter) is less than the highest carbon feed rate established during the most recent mercury and dioxins/furans stack test (as specified in Item #16.a.1 of Table 10). The following four items shall be included: ▪ Eight-hour average carbon feed rate. ▪ Reasons for occurrences of low carbon feed rates. ▪ Corrective actions taken by the Permittee to meet the carbon feed rate requirement. ▪ The calendar date. ii. Documentation of each quarter when total carbon purchased and delivered to the facility is less than the total required quarterly usage of carbon. If the Permittee chooses to evaluate total carbon			

Table 11 - Applicable Reporting Requirements				
Item #	**Reporting Requirements**	**Frequency of Reporting**	**Applicable Emission Unit**	**Regulatory Cite**
	purchased and delivered on a MWC unit basis, the total carbon purchased and delivered for each individual municipal waste combustion unit at the facility shall be recorded. The following five items shall be included: ▪ Amount of carbon purchased and delivered to the plant. ▪ Required quarterly usage of carbon. ▪ Reasons for not meeting the required quarterly usage of carbon. ▪ The corrective actions taken by the Permittee to meet the required quarterly usage of carbon. ▪ The calendar date.			
14.	Upon approval from DES, the Permittee may change the semiannual or annual reporting dates. The Permittee shall refer to 40 CFR 60.19(c) for procedures to seek approval to change reporting dates.	N/A	EU01 & EU02	Env-A 3307.02(b)

J. Compliance Schedule (Env-A 3308.02):

1. The MWC units (EU01 & EU02) shall comply with the emission limits specified in Env-A 3303 by **April 11, 2004**, except as provided below:
   a. MWC units requiring more time to comply with the emission limits specified in Env-A 3303 shall comply with such requirements by **December 6, 2005** by submitting the following:
      i. A final control plan by October 11, 2003; and
      ii. Notification of compliance by December 6, 2005.

IX. Requirements Currently Not Applicable:

Requirements not currently applicable to the facility were not identified by the Permittee.

General Title V Operating Permit Conditions

X. Issuance of a Title V Operating Permit:

A. This Permit is issued in accordance with the provisions of Env-A 609. In accordance with 40 CFR 70.6(a)(2), this Permit shall expire on the date specified on the cover page of this Permit, which shall not be later than the date five (5) years after issuance of this Permit.

Permit expiration terminates the Permittee's right to operate the Permittee's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

B. Pursuant to Env-A 609.02(b), this Permit shall be a state permit to operate as defined in RSA 125-C:11, III.

XI. Title V Operating Permit Renewal Procedures:

Pursuant to Env-A 609.06(b), an application for renewal of this Permit shall be considered timely if it is submitted to the Director at least six months prior to the designated expiration date of this Permit.

XII. Application Shield:

Pursuant to Env-A 609.07, if an applicant submits a timely and complete application for the issuance or renewal of a Permit, the failure to have a Permit shall not be considered a violation of this part until the Director takes final action on the application.

XIII. Permit Shield:

A. Pursuant to Env-A 609.08(a), a permit shield shall provide that:

1. For any applicable requirement or any state requirement found in the New Hampshire Rules Governing the Control of Air Pollution specifically included in this Permit, compliance with the conditions of this Permit shall be deemed compliance with said applicable requirement or said state requirement as of the date of permit issuance; and

2. The Permitee need not comply with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and specifically identified in Section IX of this Title V Operating Permit as not applicable to the stationary source or area source.

B. The permit shield identified in Section XIII.A. of this Permit shall apply only to those conditions incorporated into this Permit in accordance with the provisions of Env-A 609.08(b). It shall not apply to certain conditions as specified in Env-A 609.08(c) that may be incorporated into this Permit following permit issuance by DES.

C. If a Title V Operating Permit and amendments thereto issued by the DES does not expressly include or exclude an applicable requirement or a state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, that applicable requirement or state requirement shall not be covered by the permit shield and the Permittee shall comply with the provisions of said requirement to the extent that it applies to the Permittee.

D. If the DES determines that this Title V Operating Permit was issued based upon inaccurate or incomplete information provided by the applicant or Permittee, any permit shield provisions in said Title V Operating Permit shall be void as to the portions of said Title V Operating Permit which are affected, directly or indirectly, by the inaccurate or incomplete information.

E. Pursuant to Env-A 609.08(f), nothing contained in Section XIII of this Permit shall alter or affect the ability of the DES to reopen this Permit for cause in accordance with Env-A 609.18 or to exercise its summary abatement authority.

F. Pursuant to Env-A 609.08(g), nothing contained in this section or in any title V operating permit issued by the DES shall alter or affect the following:

1. The ability of the DES to order abatement requiring immediate compliance with applicable requirements upon finding that there is an imminent and substantial endangerment to public health, welfare, or the environment;

2. The state of New Hampshire's ability to bring an enforcement action pursuant to RSA 125-C:15,II;

3. The provisions of section 303 of the CAA regarding emergency orders including the authority of the EPA Administrator under that section;

4. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

5. The applicable requirements of the acid rain program, consistent with section 408(a) of the CAA;

6. The ability of the DES or the EPA Administrator to obtain information about a stationary source, area source, or device from the owner or operator pursuant to section 114 of the CAA; or

7. The ability of the DES or the EPA Administrator to enter, inspect, and/or monitor a stationary source, area source, or device.

XIV. Reopening for Cause:

The Director shall reopen and revise a Title V Operating Permit for cause if any of the circumstances contained in Env-A 609.18(a) exist. In all proceedings to reopen and reissue a Title V Operating Permit, the Director shall follow the provisions specified in Env-A 609.18(b) through (g).

XV. Administrative Permit Amendments:

A. Pursuant to Env-A 612.01, the Permittee may implement the changes addressed in the request for an administrative permit amendment as defined in Env-A 100 immediately upon submittal of the request.

B. Pursuant to Env-A 612.01, the Director shall take final action on a request for an administrative permit amendment in accordance with the provisions of Env-A 612.01(b) and (c).

XVI. Operational Flexibility:

A. Pursuant to Env-A 612.02, the Permittee subject to and operating under this Title V Operating Permit may make changes involving trading of emissions, off-permit changes, and section 502(b)(10) changes at the permitted stationary source or area source without filing a Title V Operating Permit application for and obtaining an amended Title V Operating Permit, provided that all of the following conditions are met, as well as conditions specified in Section XVI. B through E of this permit, as applicable. At this point, DES has not included any permit terms authorizing emissions trading in this permit.
   1. The change is not a modification under any provision of Title I of the CAA;

2. The change does not cause emissions to exceed the emissions allowable under the Title V operating permit, whether expressed therein as a rate of emissions or in terms of total emissions;

3. The owner or operator has obtained any temporary permit required by Env-A 600;

4. The owner or operator has provided written notification to the director and administrator of the proposed change and such written notification includes:

   a. The date on which each proposed change will occur;

   b. A description of each such change;

   c. Any change in emissions that will result;

   d. A request that the operational flexibility procedures be used; and

   e. The signature of the responsible official, consistent with Env-A 605.04(b);

5. The change does not exceed any emissions limitations established under any of the following:
   a. The New Hampshire Code of Administrative Rules, Env-A 100-3800;

   b. The CAA; or

   c. This Title V Operating Permit; and

6. The Permittee, DES, and EPA have attached each written notice required above to their copy of this Title V Operating Permit.

B. For changes involving the trading of emissions, the Permittee must also meet the following conditions:

1. The Title V Operating Permit issued to the stationary source or area source already contains terms and conditions including all terms and conditions which determine compliance required under 40 CFR 70.6(a) and (c) and which allow for the trading of emissions increases and decreases at the permitted stationary source or area source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements;

2. The owner or operator has included in the application for the Title V Operating Permit proposed replicable procedures and proposed permit terms which ensure that the emissions trades are quantifiable and federally enforceable for changes to the Title V Operating Permit which qualify under a federally- enforceable emissions cap that is established in the Title V Operating Permit independent of the otherwise applicable requirements;

3. The Director has not included in the emissions trading provision any devices for which emissions are not quantifiable or for which there are no replicable procedures to enforce

emissions trades; and

4. The written notification required above is made at least 7 days prior to the proposed change and includes a statement as to how any change in emissions will comply with the terms and conditions of the Title V Operating Permit.

C. For off-permit changes, the Permittee must also meet the following conditions:

1. Each off-permit change meets all applicable requirements and does not violate any existing permit term or condition;

2. The written notification required above is made contemporaneously with each off-permit change, except for changes that qualify as insignificant under the provisions of Env-A 609.03;

3. The change is not subject to any requirements under Title IV of the CAA and the change is not a Title I modification;

4. The Permittee keeps a record describing the changes made at the source which result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this Permit, and the emissions resulting from those changes; and

5. The written notification required above includes a list of the pollutants emitted and any applicable requirement that would apply as a result of the change.

D. For section 502(b)(10) changes, the Permittee must also meet the following conditions:

1. The written notification required above is made at least 7 days prior to the proposed change; and

2. The written notification required above includes any permit term or condition that is no longer applicable as a result of the change.

E. Pursuant to Env-A 612.02(f), the off-permit change and section 502(b)(10) change shall not qualify for the permit shield under Env-A 609.08.

XVII. Minor Permit Amendments:

A. Prior to implementing a minor permit modification, the Permittee shall submit a written request to the Director in accordance with the requirements of Env-A 612.04(b).

B. The Director shall take final action on the minor permit amendment request in accordance with the provisions of Env-A 612.04(c) through (g).

C. Pursuant to Env-A 612.04(g), the permit shield specified in Env-A 609.08 shall not apply to minor permit amendments under Section XVII. of this Permit.

D. Pursuant to Env-A 612.04(i), the Permittee shall be subject to the provisions of Env-A 614 and Env-A 615 if the change is made prior to the filing with the Director of a request for a minor permit amendment.

XVIII. Significant Permit Amendments:

A. Pursuant to Env-A 612.05, a change at the facility shall qualify as a significant permit amendment if it meets the criteria specified in Env-A 612.05(a)(1) through (7).

B. Prior to implementing the significant permit amendment, the Permittee shall submit a written request to the Director which includes all the information as referenced in Env-A 612.05(b) and (c) and shall be issued an amended Title V Operating Permit from the DES. The Permittee shall be subject to the provisions of Env-A 614 and Env-A 615 if a request for a significant permit amendment is not filed with the Director and/or the change is made prior to the issuance of an amended Title V Operating Permit.

C. The Director shall take final action on the significant permit amendment in accordance with the Procedures specified in Env-A 612.05(d), (e) and (f).

XIX. Title V Operating Permit Suspension, Revocation or Nullification:

A. Pursuant to RSA 125-C:13, the Director may suspend or revoke any final permit issued hereunder if, following a hearing, the Director determines that:

1. The Permittee has committed a violation of any applicable statute or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution, order or permit condition in force and applicable to it; or

2. The emissions from any device to which this Permit applies, alone or in conjunction with other sources of the same pollutants, presents an immediate danger to the public health.

B. The Director shall nullify any Permit if, following a hearing in accordance with RSA 541-A:30, II, a finding is made that the Permit was issued in whole or in part based upon any information proven to be intentionally false or misleading.

XX. Inspection and Entry:

Pursuant to Env-A 614.01, EPA and DES personnel shall be granted access to the facility covered by this Permit, in accordance with RSA 125-C:6,VII for the purposes of: inspecting the proposed or permitted site; investigating a complaint; and assuring compliance with any applicable requirement or state requirement found in the New Hampshire Rules Governing the Control of Air Pollution and/or conditions of any Permit issued pursuant to Chapter Env-A 600.

XXI. Certifications:

A. Compliance Certification Report

In accordance with 40 CFR 70.6(c) the Responsible Official shall certify for the previous calendar year that the facility is in compliance with the requirements of this permit. The report shall be submitted annually, no later than April 15th of the following year. The report shall be submitted to the DES and to the U.S. Environmental Protection Agency – Region I. The report shall be submitted in compliance with the submission requirements below.

In accordance with 40 CFR 70.6(c)(5), the report shall describe:

1. The terms and conditions of the Permit that are the basis of the certification;

2. The current compliance status of the source with respect to the terms and conditions of this Permit, and whether compliance was continuous or intermittent during the reporting period;

3. The methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and

4. Any additional information required by the DES to determine the compliance status of the source.

B. Certification of Accuracy Statement

All documents submitted to the DES shall contain a certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in accordance with the requirements of 40 CFR 70.5(d) and contain the following language:

> "I am authorized to make this submission on behalf of the facility for which the submission is made. Based on information and belief formed after reasonable inquiry, I certify that the statements and information in the enclosed documents are to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

All reports submitted to DES (except those submitted as emission based fees as outlined in Section XXIII of this Permit) shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN: Section Supervisor, Compliance Bureau

All reports submitted to EPA shall be submitted to the following address:

Office of Environmental Stewardship
Director Air Compliance Program
United States Environmental Protection Agency
1 Congress Street
Suite 1100 (SEA)
Boston, MA 02114-2023
ATTN: Air Compliance Clerk

XXII. Enforcement:

Any noncompliance with a permit condition constitutes a violation of RSA 125-C:15, and, as to the conditions in this permit which are federally enforceable, a violation of the Clean Air Act, 42 U.S.C. Section 7401 et seq., and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the DES and/or EPA. Noncompliance may also be grounds for assessment of administrative, civil or criminal penalties in accordance with RSA 125-C:15 and/or the Clean Air Act. This Permit does not relieve the Permittee from the obligation to comply with any other provisions of RSA 125-C, the New Hampshire Rules Governing the Control of Air Pollution, or the Clean Air Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this Permit.

In accordance with 40 CFR 70.6 (a)(6)(ii), a Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

XXIII. Emission-Based Fee Requirements:

A. The Permittee shall pay an emission-based fee annually for this facility as calculated each calendar year pursuant to Env-A 704.03.

B. The Permittee shall determine the total actual annual emissions from the facility to be included in the emission-based multiplier specified in Env-A 704.03(a) for each calendar year in accordance with the methods specified in Env-A 620.

C. The Permittee shall calculate the annual emission-based fee for each calendar year in

$$FEE = E * DPT * CPIm * ISF$$

accordance with the procedures specified in Env-A 704.03 and the following equation:
Where:

FEE =	The annual emission-based fee for each calendar year as specified in Env-A 704.
E =	The calculation of total annual emissions as specified in Env-A 704.02 and the provisions specified in Env-A 704.03(a).
DPT =	The dollar per ton fee the DES has specified in Env-A 704.03(b).
CPIm=	The Consumer Price Index Multiplier as calculated in Env-A 704.03(c).
ISF =	The Inventory Stabilization Factor as specified in Env-A 704.03(d).

D. The Permittee shall contact the DES each calendar year for the value of the Inventory Stabilization Factor.

E. The Permittee shall contact the DES each calendar year for the value of the Consumer Price Index Multiplier.

F. The Permittee shall submit, to the DES, payment of the emission-based fee and a summary of the calculations referenced in Sections XXIII.B. and C of this Permit for each calendar year by

October 15th of the following calendar year in accordance with Env-A 704.04. The emission-based fee and summary of the calculations shall be submitted to the following address:

New Hampshire Department of Environmental Services
Air Resources Division
6 Hazen Drive
P.O. Box 95
Concord, NH 03302-0095
ATTN.: Emissions Inventory

G. The DES shall notify the Permittee of any under payments or over payments of the annual emission-based fee in accordance with Env-A 704.05.

XXIV. Duty To Provide Information:

In accordance with 40 CFR 70.6 (a)(6)(v), upon the DES's written request, the Permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the Permit, or to determine compliance with the Permit. Upon request, the Permittee shall furnish to the DES copies of records that the Permittee is required to retain by this Permit. The Permittee may make a claim of confidentiality as to any information submitted pursuant to this condition in accordance with Env-A 103 at the time such information is submitted to DES. DES shall evaluate such requests in accordance with the provisions of Env-A 103.

XXV. Property Rights:

Pursuant to 40 CFR 70.6 (a)(6)(iv), this Permit does not convey any property rights of any sort, or any exclusive privilege.

XXVI. Severability Clause:

Pursuant to 40 CFR 70.6 (a)(5), the provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

XXVII. Emergency Conditions:

Pursuant to 40 CFR 70.6 (g), the Permittee shall be shielded from enforcement action brought for noncompliance with technology based[14] emission limitations specified in this Permit as a result of an emergency[15]. In order to use emergency as an affirmative defense to an action brought for noncompliance, the Permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

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[14] Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

[15] An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

A. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

B. The permitted facility was at the time being properly operated;

C. During the period of the emergency, the Permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this Permit; and

D. The Permittee submitted notice of the emergency to the DES within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

XXVIII. Permit Deviation:

In accordance with 40 CFR 70.6(a)(3)(iii)(B), the Permittee shall report to the DES all instances of deviations from Permit requirements, by telephone, fax, or e-mail (pdeviations@des.state.nh.us) within 24 hours of discovery of such deviation. This report shall include the deviation itself, including those attributable to upset conditions as defined in this Permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

Within 15 days of discovery of the permit deviation, the Permittee shall submit a written report including the above information as well as the following: preventive measures taken to prevent future occurrences; date and time the permitted device returned to normal operation; specific device, process or air pollution control equipment that contributed to the permit deviation; type and quantity of excess emissions emitted to the atmosphere due to permit deviation; and an explanation of the calculation or estimation used to quantify excess emissions.

Said Permit deviation shall also be submitted in writing to the DES in the semi-annual summary report of monitoring and testing requirements due July 31st and January 31st of each calendar year. Deviations are instances where any Permit condition is violated and has not already been reported as an emergency pursuant to Section XXVII. of this Permit.

Reporting a Permit deviation is not an affirmative defense for action brought for noncompliance.